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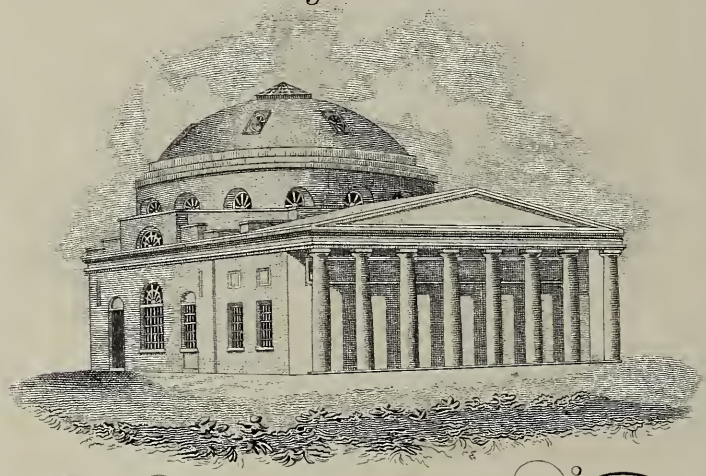

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## of the Michigan State Medical Society

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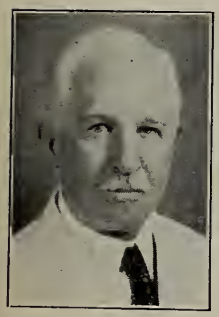
# The Andrew P. Biddle Oration

## Medical Societies and Medical Progress


By Rufus Cole, M.D.
Mt. Kisco, New York

RUFUS COLE, M.D.

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■ As I STOP to take stock of my professional life, I discover that besides collecting other things I have been accumulating memberships in medical societies. And now, having reached the years supposed to offer opportunities for reflection, I have come to ask myself, how did medical societies originate; what were the reasons for their foundation; what have they accomplished; of what use are they?

So far as I can learn, there were no real medical societies of any significance, certainly not in the English-speaking world, until the sixteenth century, in the time of Henry VIII. At that time, medicine as a profession did not exist in England. There were a few physicians and trained surgeons. But the care of the sick was chiefly in the hands of the clericals, the apothecaries and the barber surgeons. As members of the clergy were forbidden by the canons of the church to shed blood, they employed barbers to carry out any necessary surgical measures. Drugs and medicines were supplied by the apothecaries, or storekeepers.

### Royal College of Physicians

In Italy, however, the teaching of medicine was already highly organized in a number of universities. A young graduate of Oxford, Thomas Linacre, went to Italy to imbibe something of the new learning, of which the English universities were just beginning to be faintly conscious. Becoming interested in medicine, probably through his translation of medical manuscripts, he studied and obtained a degree in medicine from the University of Padua. He returned to England, taught at Oxford, and practiced medicine. Though he was now a physician, he still remained a student; he translated Galen, and during his entire life he was a physician, scholar and grammarian —one of our profession's greatest humanists.

In time he became the physician of Henry VIII. In the hope of improving the status of the medical profession in England, Linacre in 1534 organized the Royal College of Physicians of London and was made the first president. Although the charter of the society stipulated that henceforth no person except graduates of Oxford and Cambridge should be "suffered" to exercise or practice physic, until he had been examined by the President and Elects of the College, the College has never at any time attempted to enforce that decree. It has never attempted to enforce minimum requirements for practice, but has established high standards to which all those worthy of calling themselves physicians would attempt to conform. For over 400 years, the possession of the degree of Member or Fellow of the Royal College of Physicians of London has been a guarantee that the holder

is a representative of all that is best in English medicine.

The greatest of all the fellows was William Harvey. It was in the anatomical theatre of the College that he made his dissections, carried out his experiments, gave lectures and demonstrated his evidence for the most important physiological discovery ever made, the circulation of the blood. Harvey, like Linacre, was a great physician as well as a scientist and scholar. He was the physician to Charles I and tutor to the two young princes. In these days of the excitement of war, it will do no harm for us to remember the story of Harvey at the battle of Edgehill. Before the battle, he waited with the two young princes in a wide ditch at the top of the hill, and to while away the time he took a book from his pocket and read. When a bullet grazed the ground near him he had to move, and when the battle really began, he pocketed his book and became active in assisting the wounded. Harvey built a library for the College and furnished it with books, and at his death left it his patrimonial estate, in order to provide for three objects: first, to supply an annual feast for the fellows; second, to provide for an annual oration in order to commemorate the benefactors, to exhort the fellows and members to study out the secrets of Nature by way of experiment, and to urge them to live in love and affection among themselves; and third, to provide for a librarian. Members of the medical profession everywhere have a right to be very proud that our societies originated with such an institution as the College of Physicians.

### Grocers Company and the Apothecaries

Medical societies have still another ancestor, however. In the 15th and 16th centuries fraternities of artisans and tradesmen existed, and were usually called mysteries or companies. One of the most important of these was that of the storekeepers, the Grocers Company. Belonging to this were the apothecaries. They objected to control by the untrained officials of the Grocers Company, and, in 1617, those who wished to secede were given independence through a royal decree, and the Society of Apothecaries of London was incorporated. The regular apothecaries consulted the physicians. Those of you who are familiar with *The Gold Headed Cane* will remember that it was there stated of the famous Dr. Mead, that "in the forenoons, apothecaries used to come to him, at Tom's [a coffee house] near Covent Garden, with written or verbal reports of cases, for which he prescribed without seeing the patient, and took half-guinea fees." Many apothecaries, however, did not bother to consult a physician, and in 1703 an apothecary, named Rose, was prosecuted for advising and treating a patient without consultation. The final decision by the courts was that apothecaries be allowed to advise their patients as well as to treat them. "This has been termed the Charter of the general practitioner." Ever since then the society has given examinations to those desiring to become members and to practice medicine. Though all connection with trade has now been severed, it still remains a society chiefly, if not entirely, interested in the qualifications for general practitioners, and during its long and honorable career it has consistently striven to elevate these requirements.

### Scientific Societies of the 17th Century

A third possible source from which our medical societies take origin is the scientific societies of the 17th century, which developed almost simultaneously in Italy, France, Germany and England. As during the fifteenth and early sixteenth centuries occurred the great renaissance of learning and scholarship, so in the latter half of the sixteenth and seventeenth centuries came the dawn of modern science, the beginning of an era in which we are now living. The desire to learn more about natural phenomena possessed men's minds, observation and experiment took the place of dialectics. It was an era for amateurs, men with brilliant minds, who did not confine their interests to narrow fields, and it is not surprising that physicians took an important part in the new movement. Acute interests, such as these men possessed, were bound to draw them into communication with one another, and so the seventeenth century saw the origin of the great scientific societies, some of which still exist. Francis Bacon, in *New Atlantis,* described as Solomon's house, communities of men working with common scientific interests. But groups of scientists existed in Italy even before Bacon's imaginative and romantic tale appeared.

*Academia Naturæ Curiosorum.*—A young German doctor from the small town of Schweinfurth, in Bavaria, studied in Italy during this period, and became interested in the work of these groups and also read Francis Ba-

con's *New Atlantis*. This young doctor, Johann Lorenz Bausch, went back to Schweinfurth and, in association with three other doctors of the town, organized a society in 1652 for the study of scientific problems, and the publication of their investigations. They called their society Academia Naturæ Curiosorum. The immediate object was the advancement of medicine, but interests soon spread to all natural phenomena. This society still exists as the Deutsche Academie der Naturforscher. It is the oldest scientific society still in existence, and it is of interest that it was started by four doctors at the close of the Thirty Years' War, when their country was in ruins, and that its origin was inspired by the romantic tale, *New Atlantis*.

*Accademia del Cimento*.—Doctors, although they did not found it, played an important part in the Accademia del Cimento, the Academy of Experiment, organized in Florence in 1657, six years after the German society. It lasted only ten years, but the studies were of great significance, and the members were important figures in science. Among them were a number of physicians who played important rôles in establishing physiology and medicine on a scientific basis—Borelli, Malpighi, Redi, Stensen, and others.

*Royal Society of London*.—This is true also of the Royal Society of London, founded in 1662, the most important of all the scientific societies founded in the 17th century. This society was the outcome of informal meetings held by a small group at London and Oxford for the purpose of discussing the new, or experimental philosophy. Among the members of this group were a number of doctors. One of their rules was that any Fellow of the Royal College of Physicians might join. There has always been a considerable number of physicians in the Royal Society. Sydenham became a fellow in 1700. Sir Hans Sloan, the famous physician, President of the College of Physicians, and founder of the British Museum, was the first physician to be made president.

Medical societies of later years have undoubtedly drawn their inspiration from the three sources I have mentioned: The Royal College of Physicians, The Society of Apothecaries and the Scientific Societies organized in the 17th century, the College, consecrated to learning, the Society of Apothecaries, interested in the relations of practice to society, and the Scientific Societies, devoted to experiment. None of the later medical societies have been copied directly from any of these earlier organizations, no one of them has devoted itself exclusively to a single one of the respective fields, but every one has been interested in one or more of these domains, some of them in all.

### Medical Society of Edinburgh

In 1734, two hundred years after the foundation of the College of Physicians, six fellow medical students at the University of Edinburgh, "the foremost in application and knowledge" . . . met together "for their mutual instruction and advancement in their studies." Once a fortnight a meeting was held at which a dissertation by one of their members was discussed, and in 1737 this society, now composed of ten members, was formally organized as the Medical Society of Edinburgh. Conditions in Edinburgh at this time were propitious for such an undertaking. There was here a distinguished medical faculty, all the members of which had studied in Leyden under Boerhaave, and were carrying on clinical teaching in the Royal Infirmary which had been opened in 1729. This society, now the Royal Medical Society of Edinburgh, has been devoted primarily to fostering clinical and scientific medicine. Admission is difficult and includes the presentation of an original dissertation. For us this society is of much interest, since it undoubtedly influenced greatly the organization and development of societies in this country.

### Origin of American Societies

Two London physicians were also influential in starting and moulding the character of our societies, Dr. Samuel Fothergill, the great friend of Franklin, and Dr. John Coakley Lettsom, who carried on a wide correspondence with medical men in this country, was made an honorary member of most of the societies started here during his lifetime and became an honorary member and conservator of the New York Hospital. Dr. Fothergill was one of the early members of the Edinburgh Society and so was very familiar with that organization. Dr. Lettsom, somewhat younger, a protégé of Fothergill, was a most picturesque figure. He was born in Tortola in the West Indies, was taken to London when very young, was educated there, and was apprenticed to an apothecary. But the financial affairs of his family were in a bad way, so he returned to Tor-

tola where he arrived with £50 in his pocket. His first act was to liberate his slaves. Then he practiced medicine on the island and in six months had made £2000. He gave half to his mother, returned to Europe, took his M.D. degree in Leyden, and started in practice in London, where, probably aided by Fothergill, he soon had an enormous practice and is said to have made as much as £12,000 in a single year. There are a half dozen versions of the famous play on his name, of which this is one,

> I, John Lettsom,
> Blisters, bleeds and sweats 'em
> And if then they choose to die,
> I, John, lets 'em.

Dr. Lettsom was not a graduate of an English university and therefore could not become a fellow of the College, so he started a society of his own, the London Medical Society. This society is still in existence. It has occupied an important place in the history of English medicine and, especially in its earlier years, gave to its members a position of greater importance in the eyes of the public, increased the self-respect of the less well educated and less prosperous members, and aided in their development and education.

*Philadelphia Medical Society.*—In the American colonies, during the very early period, clergymen, carrying out what Cotton Mather called the "Angelical Conjunction," had acted as doctors as well as priests. But in the 18th century, before the Revolution, this practice had been largely given up and the care of the sick was mainly in the hands of men with almost no medical training at all. There was plenty of sickness, doctoring was profitable and many untrained men hung out their shingles. After the middle of the century there was a sprinkling of men, mostly from Boston and Philadelphia, who went abroad to study medicine, chiefly in London and Edinburgh. They became the leading men here and were instrumental in starting the societies in this country. Among them were two especially, who played important parts in the development of medicine in this country, John Morgan and William Shippen. Both were Philadelphians and both studied under Fothergill and received their medical degrees from Edinburgh. Shippen returned in 1762, started in practice and at the same time gave lectures in anatomy, the first systematic anatomical lectures ever given in this country. Morgan came back three years later, the best educated, and reputedly the most talented doctor in America. Soon after his return, Morgan was made Professor of the Theory and Practice of Medicine in the College of Philadelphia, and this was the beginning of the first medical school in this country, later to become the Medical Department of the University of Pennsylvania. On May 3, 1765, he delivered his "memorable and prophetic" address on medical education, which proposed standards that were only realized 100 years later. Shippen was of a jealous, envious disposition; he felt that Morgan was stealing his thunder, and as a result these men became bitter rivals and enemies, with unfortunate results for the future of medicine in America.

Although Shippen, after his return from Europe, had made an effort to start a medical society, nothing came of it. But no sooner had Morgan returned than he started the Philadelphia Medical Society (1765), the first significant society to be organized on this side of the water. Morgan invited all the leading doctors of Philadelphia to become members, with the exception of William Shippen and his father. This certainly did not help to narrow the breach between the two rival professors. However, the society did not last long. After three years it was combined with the Society for Promoting Useful Knowledge, which had been started by Franklin in 1743, to form the American Philosophical Society which is still in existence. Although doctors were active in the Philosophical Society, Philadelphia remained without any real medical society from 1768 until 1787. During this period the revolutionary war was fought, and Shippen and Morgan continued their rivalry, now more serious. At the outbreak of the war Morgan had been made director general of the hospitals, but through Shippen's connivance, Morgan was dismissed from the army and Shippen was put in his place. In retaliation, Morgan had Shippen court-martialed. At one time Shippen even had Morgan put in jail for slander. It was a bitter struggle and left Morgan a broken man. He retired from active life, although he held his professorship until his death in 1789.

*College of Physicians of Philadelphia.*—In 1787, the war being over and quiet being restored,

a new society in Philadelphia was organized, the College of Physicians of Philadelphia, and in the choice of the name, the members were undoubtedly influenced by the name of the oldest medical society in England. Its real parent, however, was the Edinburgh Medical Society. "Weir Mitchell used to say that genealogically our College was the child of Edinburgh and the grandchild of Leyden." Though Morgan took no active part in the organization of the new society, it is certain that it was different than it would have been without the influence which he still exerted. However, another man had now taken his place at the head of the medical affairs in Philadelphia. Benjamin Rush, ten years younger than Morgan, had also studied in Edinburgh and London, and on Morgan's death became his successor. Rush was cast in a different mold from Morgan, much more practical and ready to make compromises, much more a man of affairs, politically minded, he lacked Morgan's idealism. He was neither a great student nor a scientist. John Redman was made president of the College, but Rush gave the introductory lecture. In this address Rush laid stress on the relation of the society to the government. His attitude toward the scientific program was neither very imaginative nor stimulating. Among other things, he said "a fellowship in our College will become in time not only the sign of ability but an introduction to business." This address is of much interest as it was the first promulgation in this country of the purposes of a medical society. It was, on the whole, an able address, but it lacked the insight, idealism and inspiration of John Morgan's speech on education made 25 years before.

The College was not established to grant degrees; that was taken care of by the university. Nor was it even intended to be a teaching institution. At first it took quite an active part in public health and other matters. During the yellow fever epidemics, the question whether the disease was of local origin or whether it was infectious and imported from without, was very violently discussed at frequent meetings. The college held at all times that the disease was imported and spread by contagion. Benjamin Rush took the opposite view, holding that the disease was he result of filth in the streets of the city. He felt so strongly about this, and about the attitude of the society, that, in 1797, he resigned from the College. In 1802, Lettsom sent to the College a supply of vaccine virus, and he was made an honorary member. On the other hand, Jenner, who was also proposed, failed of election. So do the wisest sometimes fail to recognize the source of important new knowledge.

With the passing of time and the development of other organizations, the need for the College to take an active part in public affairs became less pressing, and the society "tended more and more to function as a purely scientific body, dedicated chiefly to the exchange and publication of scientific reports based on individual research and practice." The meetings are held monthly and a number of lectureships have been endowed. The library has always been one of the most important features of the College and it is now one of the important medical libraries of the world. It has almost 150,000 volumes, including over 400 incunabulæ. Largely because of the library, the physicians of Philadelphia have always been interested in medical literature and culture.

In later years, even among the fellows, the criticism has been expressed, just as it has been in the case of its namesake in London, that it is not as active as it should be, that it should take more part in public affairs. It may be pointed out, however, that the accomplishments of this society, though in part intangible, have been and still are very great. The medical profession in Philadelphia has always been distinguished for its character, its learning and its devotion to the traditions of medicine. In no city in the country has the profession been held in higher esteem by the people. For all this the College may take a good share of the credit. Societies, like men, cannot be measured entirely by their activities. What men are may be as important as what they accomplish.

**This society is important, not only because of its age and history, but because it is a type of society that has been frequently imitated in this country. These societies have usually been called academies, or, in some cases, institutes, not because they are teaching organizations but because they are intended to be chiefly scientific associations, with the membership limited to the more worthy and best educated members of the profession. Many of these academies have also developed libraries.**

The Academy of Medicine in New York, founded in 1847, now has a library of almost 250,000 volumes, and is exceeded in size, in this country, only by the Library of the Surgeon General in Washington. Some of the academies have maintained the high scholarly and scientific ideals which at first distinguished them. Others have become largely interested in medico-political matters and, with propriety, can hardly be distinguished as Academies, as that term is generally understood.

*New Jersey State Medical Society.*—Societies with a less restricted membership, and concerning themselves to a considerable extent with medico-political and medico-social affairs, began to be organized very early in this country. In 1766, there was organized the New Jersey State Medical Society with 17 members. This society was formed for the purpose of controlling medical practice in the state and for regulating fees.

**It is still in existence and is claimed to be the oldest medical society in the United States. However, it was only legally incorporated in 1790, and, therefore, the glory attached to being the oldest medical society still existing in the United States is claimed by the Massachusetts Medical Society, which was incorporated in 1781. Wisely, the Massachusetts Society refrained from dealing with the matter of fees, and, by its charter, control of medical practice in the state was placed in its hands in perpetuity. It was from the first an organization for regulating practice, not a scientific society.**

That it was very conservative is shown from the record of its relations with Benjamin Waterhouse, the Professor of Medicine at Harvard, who introduced vaccination into this country. Apparently the society felt it should go very slowly in this matter. It was not until 1808, ten years after the publication of Jenner's *Inquiry,* and nine years after Waterhouse had successfully vaccinated seven of his own children, that the society put itself on record as convinced of the value of vaccination. Of that contribution to medicine which is probably the greatest ever made in this country, certainly in Massachusetts, the introduction of ether anesthesia, the society apparently remained blissfully unconscious. In the history of the Massachusetts Medical Society of 500 pages, ether anesthesia is not even mentioned. In spite of all this, the society became, in later years, a dignified, useful corporation, controlling the licensing of physicians in Massachusetts until the passage of the medical practice act in 1914, and it has succeeded in maintaining the profession in the state at a high level.

*Michigan and Other State Societies.*—Mainly with the purpose of controlling the licensing of practitioners, a large number of state and county medical societies were formed during the first half of the nineteenth century. It is undoubtedly a source of great pride to you that in 1820, when there were societies in only eight of the states, all of them on the Atlantic seaboard, a medical society was organized by the doctors living in the far-off Territory of Michigan. Only three years before, Dr. John L. Whiting had arrived in Detroit, on horseback, to practice in what was then practically a wilderness, with only a few scattered settlements inhabited by fur traders. He had come from New York State, where a state medical society had been organized ten years before. He brought together seven doctors, three from Detroit, and one each from Pontiac, St. Claire, Mount Clemens and Monroe, and organized a medical society—seven members, four of them officers. As you know, your society has not had an uninterrupted existence, but, except for the name, the present society is the same one organized by Dr. Whiting one hundred and twenty years ago.

### American Medical Association

By 1844 societies had been established in 15 states, only three of them, including Michigan, west of the Alleghanies. To the annual meeting of the New York State Medical Society, in that year, there came a young delegate from Broome County, named Dr. Nathan Smith Davis, only 27 years of age. He had been born on a small farm in Northern New York, his mother died when he was seven years old, and he had had a difficult childhood and youth; his father had been able to send him but for a single term to the neighboring Cazinova Seminary. When 17 years of age, he commenced to study medicine in the office of a county doctor, and at 20 he received a diploma from the College of Physicians and

Surgeons of Western New York. He practiced for a few months in a small village, was married, and then moved to Binghamton, Boone County. It is obvious that his formal education was as meagre as can be imagined. But young Davis had health and he was determined to have an education. While practicing, he studied in every spare moment, and before very long, besides rapidly becoming a leading doctor in his town, he was lecturing to classes in the Binghamton Academy on physiology, botany, chemistry and other subjects. He was elected secretary of his county society in 1841, librarian in 1843, and the following year he was made a delegate to the state society. If any one could know how inefficient the medical education of that day was, young Dr. Davis should. And he felt very strongly about it. So, at this, his first meeting of the State society, he introduced some resolutions, declaring " a four months college term too short for an adequate course of lectures on all the branches of medical science, and the standard of education, both preliminary and medical, required by the schools previous to the granting of their diplomas, altogether too low." It seems almost unbelievable, in the light of the extent and complexity of present-day medical education, that less than 100 years ago, in even the best medical schools of this country, a four months' lecture course was considered sufficient to impart to the prospective doctor all that was known of medical science and practice. Dr. Davis' resolutions gave rise to some discussion, but they were merely referred to a committee, of which Dr. Davis was made chairman. During the year, he persuaded most of the county societies of the state to sanction the principles they contained, and the next year the committee reported. Dr. Davis, of course, again strongly recommended the resolutions, but another member brought in an unfavorable report. He said that the requirements of the colleges in New York State were as high as those of the other states, and that if they were made more strict in New York, the students would leave the colleges in New York and go elsewhere. Dr. Davis, therefore, offered a resolution to the effect that a National Convention of delegates from all medical schools and colleges in the country be called, to meet in New York City in 1846, for the purpose of adopting some concerted action on the subject of the standards of medical education. Some of the opposition declared the project "utopian, impractical and undesirable." The resolutions, however, were adopted by the society, and Dr. Davis spent a busy year getting in touch with societies, colleges, editors and prominent physicians throughout the country. And he didn't have a corps of assistants and stenographers either!

As a result of his efforts, on May 5, 1846, eighty delegates from colleges and state societies throughout the nation met in New York and decided to form a National Medical Association. One year later, a second meeting was held at Philadelphia, with 250 delegates present, and at this meeting resolutions were passed recommending an increase in the medical course from four to six months and that students should be required to attend two full courses of lectures. It was further decided to make the organization a permanent one and to name it The American Medical Association.

It is well for us not to forget that this society was founded as the result of the desire to improve medical education on the part of a young man, Nathan Smith Davis, who himself had been deprived of the benefits of a formal education, but who became one of the best educated men of the profession.

The great improvement in medical education which has since occurred has, of course, not been due solely to the American Medical Association, but this society has never wavered in its outspoken advocacy of the highest standards, and certainly, without the support of organized medicine, reforms would have been very difficult. You all know of the other great accomplishments of the American Medical Association.

### British Medical Association

The British Medical Association was started in a somewhat different manner and with a different purpose. In 1832, through the efforts of Dr. Charles Hastings, a general practitioner of Worcester, there was organized the Provincial Medical and Surgical Association. Unlike Dr. Davis, Dr. Hastings was not greatly interested in improving medical education, there was less need for this in England, but he was very desirous of improving the quality of the general practitioners. While, at first, membership was restricted to the doctors of the provinces, in 1856 London was included, and the name of the association was changed to the British Medical Association. The British and American Associations,

therefore, were founded for different reasons but their methods have been very similar.

### Special Societies

With the gradual improvement in medical education during the latter part of the century, there occurred a great movement toward specialization in medicine and the development of national societies devoted to the various specialties. The first of these societies, the American Otological Society, was founded in 1866, and this was followed by the Neurological Society in 1875, and later by other societies representing all the various specialties. These societies are of great importance, not only because they bring together men of common interests, but because they promote the discussion of clinical and, to some extent, scientific problems without the confusion resulting from the introduction of economic, social and political questions into their deliberations. While not all these societies are animated by exactly the same spirit and high ideals, their general purpose may be well illustrated by reading to you a paragraph from the presidential address of the first president of the Association of American Physicians, Dr. Francis Delafield, in 1885. This address is probably the shortest one ever given in like circumstances and, in my humble opinion, is one of the best. It consisted of but three paragraphs, the second of which is the following:

"We all of us know why we are assembled here today. It is because we want an association in which there will be no medical politics and no medical ethics; an association in which no one will care who are the officers and who are not; in which we will not ask from what part of the country a man comes, but whether he has done good work and will do more; whether he has something to say worth hearing, and can say it. We want an association composed of members, each one of whom is able to contribute something real to the common stock of knowledge, and where he who reads such a contribution feels sure of a discriminating audience."

It is of interest that in 1907, under the influence of Dr. Osler, a society having similar purposes was organized in Great Britain, the Association of British Physicians. Thus did England, from which we obtained ideas regarding medical societies in the eighteenth century, come to us for models in the twentieth.

### Societies for Experimental Studies

Such rapid changes have occurred in medicine, especially in America, during the past forty years, that no discussion of medical societies would be complete without touching on some of the changes that have occurred in them. During the last few years of the last century, the study of the fundamental nature of disease by experimental methods was increasing rapidly, but it was largely carried on by those who were professionally chiefly interested in the underlying sciences, though a few doctors, working in the university clinics and hospitals, and a very few men working independently, were also busy. One of these men was Dr. Samuel Meltzer of New York. He had studied in Europe under the German clinicians and scientists of that period. He came to this country in 1883 to undertake practice and to engage in the study of disease. But there were very few laboratories in which such studies could be undertaken. He built up a practice in New York, but the inquiring spirit did not die. After visiting his patients, he would drive to the physiological laboratory of the College of Physicians and Surgeons, tie his horse to a lamp post, and perform some physiological experiment. Many experiments were also carried out in his own little house, often late at night. Dr. Meltzer was unique in his insistence on the importance of societies for stimulating research. With a few like minded men, in 1903, he organized the Society of Experimental Biology and Medicine which soon became familiarly dubbed the Meltzer Verein. It has now grown to have a membership of over 1,500, with 13 sections scattered over this country, Canada and China. The contributions of the members now number over eleven thousand and fill forty-three volumes.

But Dr. Meltzer was not satisfied with founding only one society. In 1908, recognizing that there was not room in the Association of American Physicians for the rapidly increasing number of scientific physicians, he was instrumental in organizing the American Society for Clinical Investigation, which has been of very great value in giving recognition and stimulus to the younger members working in experimental medicine and in giving them a forum for the presentation and discussion of their work.

A recently organized medical society is the American College of Physicians, founded in 1915.

Besides offering a meeting place for considering and discussing clinical and scientific topics, it is attempting, through organized effort, to improve postgraduate teaching and to establish minimum standards for those specializing in internal medicine. It, therefore, is more directly concerned with problems of professional organization and regulation and with controversial matters than the other organizations I have just mentioned.

**Its board of registration, in collaboration with boards representing the other specialties, and with members representing the American Medical Association, pass on the qualifications of those desiring to be regarded as specialists. The number of candidates so far accepted is over 11,000. Truly the profession is becoming specialized!**

Time will not permit me to discuss the large number of smaller societies that have been organized during the present century, some of them with original and unique functions.

### Lessons Learned

The study of history is very pleasant and interesting, but it can only affect our lives if from it we can draw conclusions and learn lessons. From the résumé of the history of medical societies, which I have presented so inadequately, it is evident that the various societies were founded for various reasons. This is not so obvious, however, if one only reads their constitutions. It has been said that "a man always has two reasons for doing anything—a good reason and the real reason." Constitutions usually state the good reasons. There is a striking similarity in the constitutions of all medical societies, just as there is in the constitutions of all countries established during the past 150 years, or, at least, until recently, when constitutions came to be considered superfluous. All these constitutions start with the statement that the purpose of the government is to promote liberty, welfare and happiness of the people, although too often these beneficent purposes are soon forgotten. So the constitutions of the medical societies usually state that they are founded to promote the science of medicine, improve the education of their members and promote public health, or words to that effect. To find what they have really stood for, it is necessary to be informed of their later activities.

From the very beginning, aside from their interest in scientific matters, medical societies were active in solving the economic and political problems confronting the profession. They were interested in the regulation of fees, the qualifications for practice, improvements in education, the behavior of physicians toward one another, medical ethics, the suppression of cults professing unusual doctrines, the relation between physicians and hospitals, and more recently, resistance to special groups who would introduce what they mistakenly believe to be reforms in medical practice, but which, if carried out, would be harmful to the public welfare.

During the past fifty years, two important trends in the activities of medical societies have taken place. First, there has occurred a great movement toward organization of the profession in order to solve medico-political and medico-social problems. Second, in the scientific field there has occurred a striking tendency toward specialization in the societies. While there are great possibilities for good in both of these trends, there are also dangers which should not be disregarded.

Organization emphasizes the importance of the mass and tends to diminish the significance of the individual, who thus loses in self-respect and public esteem and may become less interested in his own development. It tends to magnify the importance of the organizers and to lay stress on qualities which are entirely foreign to scientific or professional abilities. If not resisted, there is always danger that group interests may become paramount to public interests. Organization by special groups has become widely prevalent. The Workers Alliance, the Tariff Lobby, the Trades Unions, the Townsendites, the Big Navy Boys, the Farmer Group, the American Legion, the Youth Congress, and hundreds of other groups, all organized to promote their own interests, give rise to the fear that the public interest may be forgotten. It is important to keep in mind the fate of the guilds and companies, which had lost their usefulness by the second half of the 18th century. As one historian has said, "the medieval form of association was incompatible with the new ideas of individual liberty and free competition. . . . Intent only on promoting their own

interests and disregarding the welfare of the community, the old companies had become an unmitigated evil." Fortunately, in the medical organizations, there has as yet been no indication of putting selfish interests above the common welfare.

**Advantages and Dangers of Medical Societies**

The second tendency in our societies, that of specialization, is also not without dangers. I am referring here not so much to the societies whose interests are in the various special fields of medicine, but rather to the tendency to make a sharp division between those men who are investigating disease and widening the boundaries of knowledge and the great mass of physicians who are applying this new knowledge, with a corresponding separation of their societies. It was unfortunate enough when the chemists and physiologists and anatomists became far removed from the medical profession. That special societies should be organized by those who are engaged in particular kinds of research is inevitable, but these societies should not be the only ones interested in adding to knowledge. It has recently been suggested that men desiring to undertake research in medicine should have a special kind of training, starting very early in life. Otherwise, they had better forget about it. We may next hear of a D.M.R. degree—doctor of medical research, and the next step would be an organization formed to prevent all those not having this degree from making discoveries.

Since the boundaries of knowledge have become so widened, it is manifestly impossible for those without very specialized knowledge and training fully to comprehend certain fields, much less contribute to them. But all additions to knowledge do not come from added refinements. Most great advances are made through original conceptions and novel combinations of known facts. The day is not passed when discoveries can be made by amateurs. In any case, the importance to the individual lies not so much in succeeding as in trying. "What I aspired to be, And was not, comforts me." The scientist is one with an inquiring mind. Every physician cannot be a great discoverer, but every physician must be a student, and be ever anxious to learn new truths for himself, and not depend solely on authority, if our medical profession is to continue to be a learned, scientific one and not merely a technical craft. I have recently been interested in reading extracts from the diary and note books of Edward Jenner, all his life an active practitioner, with no laboratory and few resources. One day he was dissecting a swallow killed at mid-day. Shortly afterwards he was taking the temperature of a hedge-hog; this as a result of a letter to John Hunter asking for information, which brought the well-known reply, "But why think? Why not try?" A few days later he was dissecting a horse that died at the Kennels, "suffering from the Staggers." Reading this material, one is convinced that the discovery of vaccination for smallpox was not solely an accident.

Medical education now supplies the physician with an enormous amount of factual knowledge. No other business or profession requires so long a period of preparation. But mere acquaintance with a wide range of facts does not make a man a student, a scholar or a scientist. The wisest, the most learned, or even the most efficient men are not the stars of the "Information Please" program. Civilization itself does not depend on the extent of the known. We must still bow to the Greeks, though they possessed almost no accurate knowledge of natural phenomena.

Education only makes scholars, students, scientists and cultivated men when it so influences them that they remain forever students, scholars and investigators, not mere craftsmen. To accomplish this seems to me to be the function of the local societies and academies. The great national societies, holding meetings but once a year, cannot greatly stimulate the originality of the individual or give him opportunity for self expression.

The local society is the meeting place of men with inquiring minds, a place where members can present the results of their observations and studies. What the subjects of the communications are is not so important. Every piece of work faithfully, honestly and seriously performed is worthy. They need not all be experimental investigations, though the more of these the better. They may even be historical studies. Indeed, the report of a group of cases, or even of a very special case, may be of significance.

With the present view that physicians must know about everything relating to medicine, he is afraid to stop long enough to learn all he can about anything. The opportunities for rapid diffusion of new knowledge offered by the mul-

titude of medical journals, to say nothing of the newspapers, enable physicians to obtain a speaking knowledge of new discoveries before the ink is hardly dry on the reports. I sometimes first learn from men in remote districts of new discoveries made by my associates at the Rockefeller Institute. Sometimes scientists are accused of "knowing more and more about less and less." The physician must guard against knowing less and less about more and more.

Special stress should be laid on the importance of libraries for the local societies. Next best to having one's own library is to have easy access to a library owned by the society to which he belongs. The collection of books is of great educational value and every local society can have at least a small library. Interest should not be confined to contemporary publications. Of much importance is the collection of older books having historical significance.

In my opinion, the programs of the local and county society meetings can be of most value if the members themselves present the papers. Communications by specialists from distant cities, giving the results of their own experiments and observations, may be of value, but it is the training of the members themselves that is of greatest importance. Post-graduate courses, given by professional teachers, are in certain places very useful, but none of these methods give the same stimulus to study and work as do reports by the members themselves. Of course these should be more than hastily prepared notes or papers written without study and effort. Real lasting knowledge only comes through living "laborious days."

A presentation by a member may not be of great interest to all his colleagues. It may even require some self-sacrifice on the part of his hearers. But your turn will come and you also will want an audience. The speaker has learned much even though you have learned little. I well remember dining one evening at the house of Dr. Osler. Several young physicians were present, one of them socially-minded, and with a talent for singing pleasant ditties. After dinner he was seated at the piano, singing to amuse us and the ladies, when Dr. Osler stopped at the door. "Aren't you going over to the hospital to the medical society meeting?" he asked. The singer stopped long enough to say "Oh, I don't get much out of these medical society meetings." "Do you think I do?" Dr. Osler replied, and closed the door, not too gently. Needless to say, we all rather shamefacedly followed him.

The success of a local society depends, of course, on the quality of its members. As you all know, certain classes in college and medical school stand out above the others. This has not been due entirely to chance, but it has occurred because in these classes there were a few men of exceptional ability who set a rapid pace. The great societies have become great largely because of the high ideals and abilities of certain members. I have already mentioned Thomas Linacre, William Harvey, Lorenz Bausch, John Lettsom, John Morgan, Charles Hastings, Nathan S. Davis, William Osler, Samuel Meltzer.

It is only natural that physicians should be interested in the great economic and social problems that concern the profession as a whole, but there is always the danger that he allow these interests to usurp a dominating place in his society activities. In societies there are not infrequently a few men who are politically minded, who often know more about parlimentary rules of order than they do about the science of medicine, who are possessed of the *furor disputandi.* If these men come to control the society, it is likely to become a debating club given over to passing resolutions. There is no habit so futile and time consuming. I know of no men more addicted to this vice than doctors, unless it be college faculties.

Medical societies have been and can be of very great value. By expressing the combined opinion of the members, they can make an effective appeal to the public, can bring about medical reforms and can institute new projects of importance for the welfare of mankind. More important than their political effectiveness, however, is the influence which they exert on the members themselves and the stimulus they can give to greater endeavors. Probably most important of all is the pleasure and joy they can afford the members, not only the pleasure of attempting higher accomplishments, but also the joy of harmonious and sympathetic association with fellow members in a learned and scientific profession.

If I seem to have offered a counsel of perfection, let us remember the old saying that "in shooting an arrow one must aim high in order to reach the target."

# Sinusitis

## Orbital Complications

By W. H. Steffensen, M.D., F.A.C.S.
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■ This paper was prepared with the hope of outlining a more uniform method of approach to the treatment of orbital cellulitis and orbital abscess resulting from sinus infections. The literature on the subject is meager. I am impressed by the variations in operative treatment in those cases requiring surgery.

Orbital complications of sinusitis are dangerous because they can result in serious damage to the eye, or proceed to still more serious sequelæ —namely: osteomyelitis of the cranial vault, generalized sepsis, meningitis, dural sinus thrombosis, or brain abscess.

The mode of transmission of an inflammatory process from the sinuses to the orbit may be by (1) thrombophlebitis, (2) direct extension through dehiscences, or (3) erosion of the common party wall between the affected sinus and the orbit. Thrombophlebitis plays also the important rôle in causing this localized osteomyelitis. It was formerly believed that the common route of extension of infection to this area was by way of the lymphatics, but anatomical facts pointed out by Turner and Reynolds, and corroborated by Rouviere and his colleagues, suggest otherwise.

Approximately one-half of the entire area of the bony wall of the orbit is also the bony wall of the nasal accessory sinuses. The lateral boundary of the ethmoid capsule is the thinnest of the sinus walls. The ophthalmic artery, superior and inferior ophthalmic veins with their tributaries (principally the ethmoid vessels) are contained in the orbital cavity. The posterior ethmoidal artery furnishes almost the entire blood supply of the ethmoid labyrinth. It is apparent why its accompanying vein is so frequently involved in a process of thrombophlebitis extending infection to the orbit.

Hitz, in 1933, stated that ethmoiditis and maxillary sinusitis were the most common sources of orbital infections, but gave no percentage figures. The majority of those reporting cases have demonstrated that the ethmoid labyrinth is the most common source of orbital infections, with the frontal sinus standing second in importance. The antrum is very important in young individuals, while the sphenoid sinus seems to serve as the focus only rarely. Porter in a comprehensive review of sixty cases stated that 75 per cent were secondary to sinusitis and the ethmoid cells were involved in every case. Eighty-two per cent of his cases were in children. The mortality rate was 5 per cent. Such figures are representative of all statistical reviews on the subject.

### Diagnosis

Porter classified the various stages of orbital infection. The first stage is simple edema of the eyelids. The reaction in the second stage has progressed to exophthalmos and in the third stage there is chemosis of the conjunctiva with complete fixation of the globe.

Examination of the nose usually reveals the typical picture of an acute sinusitis. An absence of nasal signs of infection in the presence of an acute sinusitis is rare. One or all of the sinuses may be infected. Good x-ray films are invaluable in diagnosis and choice of the method of treatment. Preference should be given to some modification of the Rhese position to visualize the ethmoid cells through the orbital soft parts and avoid overlying bone shadows. Positions for visualization of the other sinuses are well standardized.

### Treatment

*Conservative.*—Treatment of the sinusitis in the first stage of an orbital inflammation will consist of the use of shrinking solutions (preferably ephedrine), warm saline irrigations, steam inhalations and internal medications. Suction should be looked upon with disfavor because of the hyperemia which follows its use.

Conservative measures usually cease to be of value when the orbital infection has passed the stage of simple edema of the eyelids. Most of the successful cases of conservative treatment have occurred in young individuals because children with sinusitis are most susceptible to edema of the orbital contents.

*Sinus Drainage.*—Sinus drainage is indicated if the orbital involvement is increasing, if the temperature remains elevated and there is definite sinus suppuration. This is particularly true if there has been a previous attack of sinusitis or an acute exacerbation of a chronic sinusitis with severe pain. The most conservative surgical procedure which will provide free drainage with a minimum of trauma is the one of choice.

The presence of an orbital cellulitis does not necessarily indicate sinus drainage. The sinusitis itself or later intracranial complications may indicate it. Therefore, in the presence of progressive symptoms from the stage of simple edema of the eyelids, it is safer to operate once too often than to wait too long. Lederer has stated "Those who have voiced an ultra-conservative attitude have probably experienced in their own hands or in those of their colleagues, unfortunate sequelæ."

The customary procedure in the case of orbital inflammation requiring sinus surgery is to infract or remove a portion of the middle turbinate, or to perform a partial ethmoidectomy intranasally.

*Orbital Abscess*—

**The treatment of an orbital abscess complicating sinusitis is always urgent, more urgent than that of an acute mastoiditis. The indications of an orbital abscess are an increasing and brawny edema of the eyelids and conjunctiva, a fixed and displaced eyeball and excessive pain. Confusion of this condition with the early stage of cavernous sinus thrombosis is clarified by careful observation of details.**

There is no single sign which permits a distinction between a simple collateral edema and an orbital abscess. Localized tenderness of the orbital wall, localized palpable infiltrations, pronounced chemosis, fixation of the eye and displacement of the globe downward and outward have all been regarded as signs of abscess in contradistinction to simple edema. None of these signs are decisive singly.

Pus from the frontal sinus usually erodes the thin bony floor just medial to the supra-orbital notch, forming an orbital abscess between the bone and the orbital periosteum. Similarly, pus from the ethmoid cells tracks through the thin os planum or the extension occurs by way of the orbital vessels. The abscess in either case is like a collar-stud (Davis). A collection of pus lies between the bone and the orbital periosteum, a second collection of pus is situated in the affected sinus and the two are connected by a pyogenic tract. It is essential to drain both collections of pus, and particularly that in the nasal accessory sinus. It is also important to respect and avoid injury to the orbital periosteum which forms an effective barrier between the abscess and the delicate orbital contents.

**Operative Procedure**

Lederer states: "We frequently have found it necessary to advise surgical procedures in accordance with the ability of the surgeon." It is not logical to advise the less experienced operator to work in the ethmoid capsule intranasally where the vision is poor and is made worse by profuse bleeding; where distortion of anatomical landmarks has occurred due to edema; and where one is limited in his inspection of the infected areas to be drained.

**The best judgment of a skilled operator only can determine the presence of suppuration deep in the orbit before pointing has occurred. This can best be investigated by aspiration or exploratory incision under direct vision. Intranasal frontal drainage is always dangerous and the Killian type of procedure carries a high mortality rate statistically.**

*Sinus Drainage.*—The most feasible approach to a drainage of the upper group of sinuses where there is an indication for more distant investigation or drainage through the periorbita as well as drainage of the infected sinuses, attacks both problems at the same time. It consists in the use of the fronto-ethmo-sphenoid technic as perfected by Lynch, Sewell and Ferris Smith. This permits direct inspection of the principal ethmoid vessels as they enter the ethmoid labyrinth. One frequently finds abscess formation about these vessels. It permits inspection of the orbit to its apex. The periorbita can be aspirated or incised diagnostically.

The ethmoid labyrinth is entered through the lachrymal fossa region and these cells are drained under direct vision. The frontal sinus can be drained at this point by removal of a portion of its floor. A Penrose drain is inserted into the

depth of the cavity and the wound left open for free drainage. The sinuses can be thoroughly operated at a later date, if indicated, and the wound closed with a minimum of visible scar.

The operative procedure is accomplished in a practically bloodless field under direct vision. It has the distinct advantage of thoroughly draining the infected areas and is done with technical safety and a minimum of trauma in an area already overwhelmed by infection, where accidents resulting from working blindly through the nose or inadequate drainage would be hazardous.

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## MISSISSIPPI VALLEY MEDICAL SOCIETY 1941 ESSAY CONTEST

The Mississippi Valley Medical Society offers annually a cash prize of $100.00, a gold medal, and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics) and practical value to the general practitioner of medicine. Certificates of merit may also be granted to the physicians whose essays are rated second and third best. Contestants must be members of the American Medical Association who are residents of the United States. The winner will be invited to present his contribution before the next annual meeting of the Mississippi Valley Medical Society at Cedar Rapids, Iowa, October 1, 2, 3, 1941, the Society reserving the exclusive right to first publish the essay in its official publication—the *Mississippi Valley Medical Journal* (incorporating the *Radiologic Review*). All contributions shall not exceed 5000 words, shall be typewritten in English in manuscript form, submitted in five copies and must be received not later than May 1, 1941. The winning essay of the 1940 contest appears in the January, 1941, issue of the *Mississippi Valley Medical Journal* (Quincy, Ill.). Further details may be secured from Harold Swanberg, M.D., Secretary, Mississippi Valley Medical Society, 209-224 W. C. U. Building, Quincy, Illinois.

# Industrial Hygiene

## Responsibility of the Medical Profession*


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■ The legal responsibility for protecting the health of our gainfully employed is a function of official public health agencies. Naturally, the coöperation of the medical profession is essential in accomplishing this end. Furthermore, for the attainment of practical results, we need the combined efforts of personnel from several of the scientific professions, especially those of the physician, the engineer, and the chemist. The present contribution is an example of such teamwork, having been prepared by a physician and an engineer. This was done purposely in order that both viewpoints would be treated.

### Interrelations

The problems of industrial hygiene must be attacked on two fronts. First, we must attack those problems concerned with the hygiene of the individual, and, second, those dealing with the environment in which the individual works and lives. The first function comes within the scope of the medical sciences and the second deals with engineering practices.

It is within the province of the medical profession to diagnose diseases and primarily to recognize the existence of such diseases as may be due to the working environment; while, based on the findings of the physician, the

*Presented before the Michigan State Medical Society meeting, Friday, September 27, 1940, Detroit, Michigan.

**engineer is in a position to learn what unhealthful conditions should be investigated and where control measures are to be initiated.**

**It is essential, therefore, that the various professions clearly understand the functions of each and approach the solution of the problems in industrial hygiene as a joint effort, and coöperate with each other to the fullest extent.**

It is well known that environmental conditions in certain work-places can contribute to diseases among workers which are unique to a particular occupation, and which do not exist in the non-industrial population. However, as will be shown later, occupational accidents and specific occupational diseases, although constituting an important problem in industrial hygiene, do not account for the major part of the time lost due to disability. It is apparent, therefore, that in addition to the problem of controlling accidents and occupational diseases, we are confronted also with the important task of the control of all diseases, which are just as common, and more important economically, among industrial workers as among those of the general population. Hence, the fact is evident for considering industrial hygiene as a function of the general field of public health.

**It is for this reason that the medical profession plays such an important rôle, since it is one of the chief concerns of that profession to assist in the promotion of better health in the community.**

### Industrial Program

If every plant had an industrial health maintenance program, and if every State health department had a comprehensive industrial hygiene service, then our problem today would not be so difficult. However, recent studies[1] made by the United States Public Health Service of health service facilities in a large number of industrial establishments, as well as those conducted by the National Industrial Conference Board,[3] indicate that such services are still far from meeting our needs. For example, in the Public Health Service analysis of approximately 17,000 establishments employing 1,500,000 workers in fifteen representative States, it was found that only 15 per cent of the employees were provided with the services of a full-time physician. These data are sufficiently representative to conclude that 85 per cent of our workers are without such full-time services. This is especially true in those plants employing less than 500 people. We may assume, therefore, that the bulk of our gainfully employed, when in need of medical services, receive them from the private practitioner, be it on a part-time basis at the plant, from "on call" physicians, or from the family physician. This is especially true with reference to the so-called non-occupational disabilities. The National Industrial Conference Board study showed that, in one-third of the plants surveyed by them, no efforts were made to supervise non-occupational disabilities, in order to assure the worker of medical attention. This study also showed that in only slightly more than one-half the plants was an effort made to promote employee health through educational means, and that only casual supervision was practiced with regard to working conditions. It is a well-known fact that the physician who spends but one or two hours a day in a plant, as well as the one who merely goes to the plant when called, has not the time to devote to a program of disease prevention. This state of affairs, therefore, calls for serious consideration on the part of the medical profession regarding its responsibility in the important field of industrial hygiene. This responsibility assumes even greater importance today with the increase in industrial activities resulting from our National Defense Program.

In order to cope effectively with this problem, it would seem essential that we first gain some knowledge of its nature and scope. In other words, before we may discuss what steps may be taken by the medical profession and others, and what opportunities industrial medicine offers, we must first examine the extent of the problem.

### Nature and Extent of the Problem

It should not be necessary today to justify the necessity for industrial hygiene by citing the abundant statistics available on the subject. However, in order to visualize the problems confronting us, it may be well to reiterate certain facts. Today we still witness annually approximately 17,000 occupational deaths from accidents, 75,000 permanent disabilities and 1,400,000 temporary disabilities. We still have many problems arising from diseases peculiar

to certain occupations, such as silicosis, lead poisoning, and the dermatoses. It is also known from many studies that industrial workers have higher rates of physical defects than non-industrial workers, and that excessive mortality is especially notable in unskilled workers, among whom the death rate from all causes is 100 per cent or more in excess of the death rate among agricultural workers. It has also been well established that the average worker in this country loses 10 days a year on account of sickness and that the amount of time lost from general illnesses is in the neighborhood of 15 times as great as the total amount lost from both accidents and occupational diseases.

**We may expect all of these problems to be magnified with the present expansion of industrial activities.**

### Present Practices in Industrial Hygiene

Industry is becoming more and more aware of its responsibilities concerning the protection and improvement of the health of its employees. This is especially true of the larger plants, which are in a better position economically to deal with this problem than the small plant, which finds it very expensive to provide more than a limited industrial health service to its workers. Some data have already been cited concerning the health service facilities now existing in industry. The National Industrial Conference Board study clearly shows that such services are on the increase, and of late have been extended to include not only the prompt treatment of injuries and diseases arising from occupational exposure, but have also included such other services as dental, ocular, x-ray, and educational programs for health promotion. Many plants have also included programs for systematic study of the working environment in an attempt to control deleterious exposures, while others have established programs designed to diminish the time lost from general illnesses.

Many non-official agencies have of late become deeply interested in, and concerned with, the problem of employee health. Some of these agencies, such as the Air Hygiene Foundation, are primarily supported by industry itself.

The Federal Government, of course, has been active in this field for many years. The United States Public Health Service has had an organized Division of Industrial Hygiene since 1914. Its functions may be considered as partly administrative, concerned with coördinating all activities, both at the Federal and State level, the promotion of industrial hygiene services in State and local health departments, and investigations carried on in the laboratory and in the field. All of these activities are conducted in coöperation with State agencies, with industry, with the medical profession, and with the other professions and organizations.

**The growth in the number of State health departments providing services in industrial hygiene has been almost phenomenal during the past four years, under the stimulation of the funds provided by the Social Security Act. Today there are thirty-one states with industrial hygiene services, employing nearly 150 professional personnel and spending approximately three quarters of a million dollars for this activity. It is realized, of course, that the present State services are limited, due to insufficient funds and trained personnel.**

If the Public Health Service and the State health departments are to be of any great assistance to industry and the medical and engineering professions in the conservation of manpower, we shall have to provide more funds and more trained personnel. One of the important needs today is training centers for personnel, so that the demands in industrial hygiene for physicians, engineers, and chemists may be met.

### Rôle of the Medical Profession

It has been stated by authorities in the field of industrial hygiene that the major types of activity are medical and surgical care to effect prompt restoration of health and earning capacity following disability, the prevention of disability in industry by the proper control of the working environment, and, finally, the promotion of health among workers. For those physicians holding positions in industry, and especially those completely responsible for furnishing an industrial health maintenance program, the Council on Industrial Health of the American Medical Association[2] has suggested a definite program.

This program consists of such functions as periodic inspection and appraisal of plant sanitation and occupational exposures, followed by the adoption and maintenance of adequate control measures. The provision of first-aid and emergency services and the prompt and early treatment for all illnesses resulting from occupational exposure are very important functions of the medical department. Impartial health appraisals of all workers, the provision of rehabilitation services for the correction of defects are additional functions of a medical department. And, finally, by means of recording and reducing absenteeism due to all types of disability and the conduct of a health promotion program, it should be possible to make real progress in reducing lost time among workers, thereby benefiting not only the worker as regards his physical health, but also yielding tangible benefits of a monetary nature to both the employer and the employee.

The Council on Industrial Health of the American Medical Association has been very active in stimulating the contributions which the physician *individually,* and through *medical organizations,* can make to the health of the industrial worker. The Council has also stimulated the formation of committees on industrial hygiene in State and county medical organizations, and has clearly outlined a program which could be adopted by the State and local societies. The program of activities which has been formulated for these committees contains the following objectives:

1. Train physicians to recognize and report occupational disease.
2. Train industry and labor to the value of industrial health conservation.
3. Elevate medical relations and standards under workmen's compensation.
4. Scrutinize all social legislation affecting industrial health.
5. Clarify relationships between industrial and private practitioners.
6. Improve relations between physicians and insurance.
7. Establish working relationships with all State agencies interested in industrial health.

We should like to expand further on several of the objectives listed.

First, it is highly essential that physicians inform themselves further concerning occupational diseases, so that they will recognize such diseases more readily in the course of their practice. It would be advantageous for a private practitioner to make this effort, in view of the fact that he may be called upon to diagnose and treat such ailments in the course of his everyday practice.

In this connection, it is pertinent to stress one other important item, namely, the necessity for obtaining an accurate and detailed occupational history. We all know to what great lengths physicians go to obtain an accurate and detailed personal and past medical history on a patient, yet, often neglect to obtain information concerning the man's exposure to toxic materials in industry. In view of the fact that a man's occupation may have a real bearing on his health, it is highly essential that a history of his occupation be obtained in detail and interpreted properly. Such an inquiry may often necessitate investigating the patient's working environment or at least obtaining information on this point from the proper plant officials, as well as from the patient himself. For example, a recent investigation by the Public Health Service has indicated that manganese poisoning may often be mistaken for multiple sclerosis or Parkinson's disease.

With further reference to the subject of occupational diseases, it should by now be obvious that unless the physician, be he in industry or in private practice, promptly reports to the proper authorities the occurrence of occupational diseases among workers, it will be next to impossible for the official agency responsible for the control of such diseases to carry out its functions. Physicians should adopt the same attitude toward the reporting of occupational diseases which now exists with regard to the reporting of communicable diseases. The recurrence of such diseases may be obviated by a prompt investigation on the part of a State industrial hygiene service of those conditions in the plant which may be the causative agent. Once this has been established, prompt measures may be taken for the control of the environmental conditions responsible for the diseases.

In addition to the responsibilities which the medical profession has with regard to occupational diseases and other functions cited herein, still another obligation should be given

consideration. This deals with advising the individual patient regarding his health. The physician is the only one to offer such advice and it is likely that he will have more success in doing so than any other single individual. The patient's coöperation should be enlisted not only in the prevention and control of diseases arising out of the occupation but also in the promotion of general health and mental well-being.

The medical profession can make still another important contribution in the field of industrial medicine by stimulating the preëmployment and periodic physical examination of workers in industry, and by calling attention to the necessity for correcting those physical defects revealed by a health examination.

### Coöperation with Agencies

We have repeatedly stressed the need for coöperating with the local health agencies, which are responsible for protecting the health of workers. The private practitioner, either as an individual or through his State and local medical organization, should utilize to the fullest extent the services which may be rendered by the official industrial hygiene division, and through it the facilities available in the entire health department. Some of the services which may be rendered by these official agencies are:

1. Consultation with plant management regarding needed corrections of environmental conditions.
2. Advice to the management and medical supervisor as to the relative toxicity of materials or processes, and advice concerning new materials prior to their introduction into the industry.
3. Assistance in developing, maintaining and analyzing absenteeism records.
4. Consultant service to medical supervisors, private physicians, compensation authorities and other State agencies regarding illness affecting workers.
5. Provision of necessary laboratory service of both a clinical and physical nature.
6. Integration of the activities of other public health bureaus in their programs for workers; for example, the control of cancer, syphilis and tuberculosis.

We have attempted to define some of the problems of industrial hygiene, the methods employed in their solution, and the contribution which the medical profession can make toward the maintenance of employee health. Dr. Selby has once said that every physician in industry should consider himself as the health officer of that industry. We should like to recommend that more emphasis be given to this viewpoint, not only by the full-time industrial practitioner, but also by the private practitioner in his contact with the industrial patient. It is only by such a viewpoint and approach that we may hope to make the progress necessary for the conservation of the health and efficiency of our millions of workers.

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# Carcinoma of the Large Bowel*

## The Problem of Early Diagnosis

By John B. Hartzell, M.D., F.A.C.S.
Detroit, Michigan

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■ Carcinoma of the colon is usually slow of growth and metastasizes late, and therefore early treatment ought to yield favorable results. However, despite the relatively lower grade of malignancy usually found in these growths, the mortality is high, suggesting that:

1. Either such lesions give no early intimation of their presence,
2. The patient has a tendency to regard such symptoms as unimportant,
3. The physicians underestimates the symptoms,
4. Diagnostic methods are not adequate, or,
5. The patient ignores the advice of the physician.

At a recent meeting of the American Society for the Control of Cancer, a letter was read from an electrical engineer,[3] aged twenty-nine, who had an inoperable carcinoma of the pelvic colon. This young man, a well educated layman, had presented himself to his physician because of a bowel complaint. His physician treated him for

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four months for colitis during which time he steadily lost ground. He then went to a clinic in a small hospital and there was given the same diagnosis, later going to another physician in a nearly city where he received more treatment for colitis. Finally, ten months from the time he first presented himself to a physician, a barium enema was administered, and a fluoroscopic examination revealed a large carcinoma. The lesion was inoperable and a colostomy was all that could be done. This individual had become reconciled to his fate, and with but a few short months to live, he writes:

"My message to you of the medical fraternity is, do not hesitate to make the worst diagnosis first. Say the bad news; then, if desirable, attempt to disprove it, but under no circumstances are you justified in trying to get the layman to report his symptoms early only to be stalled along in the diagnosis until an inoperable lesion has developed. All of the efforts to educate the layman are commendable, but much remains to be done to educate the physician to recognize the symptoms and not to hesitate in diagnosing them."

That this letter indicates that the patient is not always at fault, in that he seeks aid late in the disease, is evident, and suggests that the reasons for discovery of carcinoma of the colon late in the disease may be those expressed in points 3 and 4 above. We have analyzed the histories of cases of carcinoma of the large bowel which came to us late in the disease, in an attempt to determine, if possible, why therapy was delayed so long. Obviously, such an analysis of cases is difficult so far as determining exactly where the trouble lies and is important only in that it might point out pitfalls in diagnosis or provide a better understanding of the causes of delay. It is also to be recognized that after all the data is available and the diagnosis is assured, it is much easier to recognize points of significance in the history and physical examination than it is before the facts are known and clarified. The following cases are illustrative of some of the causes for delay in adequate therapy for carcinoma of the large bowel.

## Typical Cases

### Lesions which gave no early intimation of their presence or early symptoms were ignored by the patient:

*Case 1.*—A sixty-year-old obese man was well until five days before admission, when he began to lose appetite and notice marked fatigue. Two days prior to admission he took a laxative with good results, but felt worse. The next day he began to have lower abdominal pain and became distended, also had a chill and began to vomit. Examination—He appeared acutely ill, temperature 101 degrees, pulse 120. His abdomen was obese with moderate general distension. There was generalized muscle spasm, and the lower abdomen was tender on palpation. Leukocyte count was 34,200 per c.c., 93 per cent polymorphonuclear neutrophils. The patient was treated expectantly for one week, (duodenal suction, intravenous fluids and transfusions). As soon as his general condition permitted, a proctoscopic examination was made which was negative, but the barium enema revealed a stenosing lesion of the sigmoid. A cecostomy was performed. The patient went home one week later much improved. One month after the cecostomy, the lower portion of the descending colon and sigmoid was resected for a carcinoma. There were no palpable metastases in the liver, but there were numerous glands in the adjacent mesentery. There was evidence of an old perforation. It is but six months since the operation and the patient has remained well.

*Case 2.*—A sixty-year-old white man had suffered from hemorrhoids. Two years ago he saw a physician who recommended operation. One year ago the hemorrhoids commenced to protrude at intervals. At the same time he was passing small stools eight to ten times daily. He finally sought medical advice for his hemorrhoids at which time a stenosing cancer of the rectosigmoid was found. An abdomino-perineal resection was performed. The patient has remained well for six months. Despite the long period of time elapsing before operation was performed there were no gross metastases to the liver.

### Lesions in which the physician underestimated the importance of the symptoms or signs:

*Case 3.*—A man, aged seventy-four years, consulted his physician in a neighbouring town because of vague abdominal distress—belching and bloating. He also complained of tiring more easily than usual. He was given powders and advised to go on a vacation, but there was no improvement. Three months later a large tumor was palpated in the right side. Exploratory laparotomy revealed a carcinoma involving the greater portion of the ascending colon and hepatic flexure. This was fixed posteriorly. An ileocolostomy was performed, and the distal stump of the terminal ileum closed. The patient remained in good health for one year after the operation. Recently, the tumor has increased in size, and the patient shows signs of increasing weakness.

*Case 4.*—A sixty-year-old man was treated by the family doctor for one and one-half years for attacks of cramplike abdominal pain and constipation. An x-ray was finally advised which showed marked gaseous

distension of the colon and terminal ileum. The patient was admitted to the surgical service almost completely obstructed, and a cecostomy was performed. There was no gross involvement of the liver or lymph glands. Two weeks later 9 cm. of the descending colon was resected for an annular tumor which proved to be malignant. An end-to-end anastomosis esablished continuity. It is now one and one-half years since the operation and the patient has remained well.

Fig. 1. Roentgenogram of a barium enema, showing the left half of the colon well distended with barium. This was reported as normal by the roentgenologist.

Fig. 2. A re-examination in the oblique view shows a stenosed filling defect at the juncture of the descending colon and sigmoid which was obscured in the first examination.

**Lesion in which inadequate diagnostic methods were used even after malignancy was suspected:**

*Case 5.*—A fifty-one-year-old man consulted a physician because of a six months history of attacks of nausea, vomiting, and increasing constipation with a seventy pound weight loss. He was hospitalized eighteen days. A barium enema showed partial obstruction at the splenic flexure from what was considered to be a benign tumor. Surgical consultation was not recommended, so that exploratory laparotomy was not performed. The patient was allowed to go home with the recommendation that he return for frequent observation. Three months later he was no better and when admitted to the surgical service had an almost complete obstruction which was diagnosed as carcinoma of the splenic flexure. Exploration revealed a large tumor mass of the splenic flexure densely adherent to the greater curvature of the stomach. This was mobilized, the stomach wall repaired and an obstructive resection performed. Continuity was later established by crushing the spur and closing the colostomy. It is now over two years since the operation and the patient has remained well, despite the fact that he was operated upon late after local extension had occurred.

*Case 6.*—A male, aged sixty years, was admitted with a history of attacks of cramplike abdominal pain, increasing constipation of two months duration, and loss of twenty pounds in weight. The sigmoidoscopic examination was negative. A barium enema was reported as negative (Fig. 1). The history was suggestive of an obstructive lesion in the colon and a reëxamination with an oblique view was insisted upon. This revealed a stenosed filling defect in the descending colon which was obscured in the first examination (Fig. 2). An obstructive resection was performed, continuity being established later by crushing the spur, with closure of the colostomy. The patient remained well for only one year, dying recently of generalized carcinomatosis.

Cancer of the large bowel accounts for about one-tenth of all deaths from malignant disease. Unfortunately, it is quite impossible to delineate a symptom complex by which early carcinoma of the large bowel may be diagnosed, and it must be remembered, as has been pointed out by Fansler and Anderson,[4] that the symptoms to emphasize are not those which convince one that carcinoma is surely present, but rather those which indicate that carcinoma may possibly be present. Generally speaking, the easier it is to make the diagnosis the less the possibility of halting the fatal progress of the disease. In its incipiency, cancer of the bowel may be absolutely silent. Gradually, however, certain mild changes in bowel habit, or a vague abdominal distress may induce the patient to consult his physician. If this individual

is of a nervous type, and for years has exaggerated various complaints to his physician, he will more than likely receive reassurance and a placebo, rather than a painstaking examination. The frequency of this bad error is stressed by Steindl,[18] who reports a series of inoperable carcinomas of the large bowel in which 22 per cent had become inoperable because of errors in diagnosis. This is well illustrated by Case 3, and in retrospect, what would seem to be an inexcusable delay is represented in Case 5, since all data necessary for an accurate diagnosis were available.

### Most Common Early Signs of Carcinoma of the Large Bowel

1. Some change in bowel habit. This may be so slight that it is not considered of any importance by the patient who may believe it to be a transient upset. There may be a brief return to normal bowel habit, with a later recurrence of symptoms of irregularity of stool. There may be signs of increasing intestinal irritability with periods of diarrhea. There may also be present alternating periods of constipation.

2. There may be persistent localized pain or tenderness.

3. There may be marked weakness with associated anemia and without visible loss of blood.

4. A tumor may be palpated. This does not necessarily mean an advanced lesion, as even a small carcinoma with ulceration may develop about it a large inflammatory mass.

5. Blood in the stool, or streaked upon the stool, may signify a low ulcerating growth.

6. Intestinal obstruction, of varying degrees of severity, usually indicates an annular lesion which has been present at least one year. Cachexia, marked loss of weight, with general debilitation, usually indicates advanced malignant disease with metastases.

7. Occasionally, the insidious early symptoms may be overlooked by the patient, and the first sign of the presence of a large bowel malignancy may be the result of a perforation or an obstruction. Case 1 is illustrative of an onset of symptoms beginning with what Rankin[13] has described as "explosive suddenness."

### Why these Symptoms?

To understand the chain of symptoms produced by carcinoma of the large bowel, we must consider the right and left halves of the colon as separate organs. Rankin[11] has repeatedly stressed the importance of this fact. The cecum, ascending colon, and the right half of the transverse colon, together with the small intestine up to the papilla of Vater, are developed from the mid gut. The function of this portion of the intestine is chiefly that of digestion and absorption, and the bowel content is fluid or semi-solid. Carcinomas situated in the right half of the colon are usually large flat ulcerating lesions. They interfere with the absorptive mechansim of the mucous membrane, and owing to the greater diameter of the ascending colon, and the fact that the content is usually of fluid consistency, obstruction does not occur as commonly.

**The early symptoms may be considered as "dyspepsia," with or without localized tenderness.**

This often suggests chronic appendicitis, chronic cholecystitis, or duodenal ulcer. In a series of 100 cases of carcinomas of this segment of the colon reported by Priestly and Bargen,[10] 20 per cent had been previously subjected to celiotomy after the onset of symptoms ascribable to cancer. Fifteen had had appendectomies, one an operation on the biliary tract, and there were four exploratory laparotomies.

**In other individuals suffering from malignant lesions in the right colon, the first sign may be weakness. The patient presents himself to the physician because of unexplained fatigue and inability to perform his usual daily work. Such an individual is usually dehydrated and examination will usually reveal a marked anemia, without visible loss of blood.**

Occasionally, however, early carcinomas of this segment of the large bowel are devoid of any symptom whatsoever, and fall into the so-called silent group. Such a lesion is discovered by accident or in the course of a routine physical examination. A tumor may be palpated, or as in most lesions of the right colon, the barium enema will reveal a filling defect which is later proved to be malignant. This is moderately well illustrated by Case 1.

The left half of the transverse colon, together with the descending colon, sigmoid and rectum, are developed from the hind gut, and their function is chiefly that of storage. The wall is thicker and stronger than on the right side, and by the time the intestinal content reaches this segment of the large bowel the water has largely been absorbed, and the stool becomes formed. Malignancies here tend to encircle the bowel, resulting commonly in varying degrees of obstruction. Frequently constipation, sometimes alternating with diarrhea, is a predominant complaint, as illustrated by Case 2.

**In 125 cases studied by Rosser,[16] he found that two-thirds of those in which the growth was situated in the descending colon showed constipation and colic, while one-quarter had diarrhea.**

As the proximity of the growth approaches the rectum, the incidence of frank blood increases. Rankin[12] states that bleeding occurs in 90 per cent of carcinomas of the rectum at some stage of the disease. For those in which the growth is situated beyond the reach of the sigmoidoscope, the barium enema in the hands of the expert roentgenologist will reveal filling defects which are usually accurately interpreted. At the hepatic and splenic flexures, in the sigmoid or low down in the descending colon, it is of the greatest importance to visualize the barium enema in the lateral and oblique, as well as the antero-posterior view. Here normal superimposed bowel in the antero-posterior view may cover up a filling defect which would be overlooked unless seen in the oblique view. This point has been emphasized by Gordon-Watson,[6] and is well illustrated by Case 6. If a barium enema is negative and malignancy is suspected, the examination should be repeated in two to four weeks. Often a second barium enema will reveal a filling defect not present or not noticed at the time of the first examination. Lehman,[9] Feldman[5] et al. have stressed this point.

### Rectal Examination

**It seems obvious that digital examination of the rectum should be a routine part in any complete physical examination, and while the importance of this procedure cannot be too strongly stressed, we must emphasize that the examination should go further. Too many individuals are subjected to hemorrhoidectomy when further examination would reveal the presence of a carcinoma beyond the reach of the examining finger.**

In 28 per cent of a large series observed by Rankin and Graham[13] the patient had been subjected to hemorrhoidectomy after the onset of symptoms of carcinoma. Jones[8] states that 75 per cent of rectal carcinomas are first diagnosed as hemorrhoids. This error is by no means always the fault of the physician. Occasionally a patient, knowing he has hemorrhoids will ascribe the symptoms of malignancy to his known condition and delay further examination. Case 2 is illustrative of such an oversight on the part of the patient.

For those growths within the reach of the sigmoidoscope, direct visualization and biopsy offers the ideal method of arriving at a diagnosis. If microscopic examination of the tissue removed is positive for carcinoma, the diagnosis is conclusive. A negative report, however, may mean that the biopsy was not taken deeply enough, and a second specimen may show the presence of malignancy. There is frequently a piling up of non-malignant mucosa membrane along the border of a carcinoma. In Figure 3, a photomicrograph of a malignant lesion of the rectosigmoid is presented through the courtesy of Dr. Osborne Brines,[1] who has frequently emphasized this point. Through the sigmoidoscope, this bunched-up area appears to be a good one from which to secure a biopsy, (Area B, Figure 3), but this may show no cancer. Here it will be noted that in the vicinity of A the mucous membrane is normal, while in the vicinity of B there is hypertrophy with piling up of the mucous membrane. This area is frequently even more elevated and conspicuous by the presence of swelling from edema and secondary infection about the carcinima. A positive biopsy would have to be secured rather deeply from the vicinity of C. Dukes[2] stresses the importance of repeating a biopsy if the first is negative.

Likewise, the possibility of multiple lesions must be kept in mind when making a sigmoidoscopic study. Recently, the writer, in performing a sigmoidoscope examination, encountered a large polypoid tumor about 3 inches above the anal orifice. Biopsy and microscopic examination revealed this to be a benign adenoma. This

diagnosis did not fit into the general picture, and on repeating the sigmoidoscopic examination we succeeded in passing the scope beyond this tumor, and two inches further encountered a typical

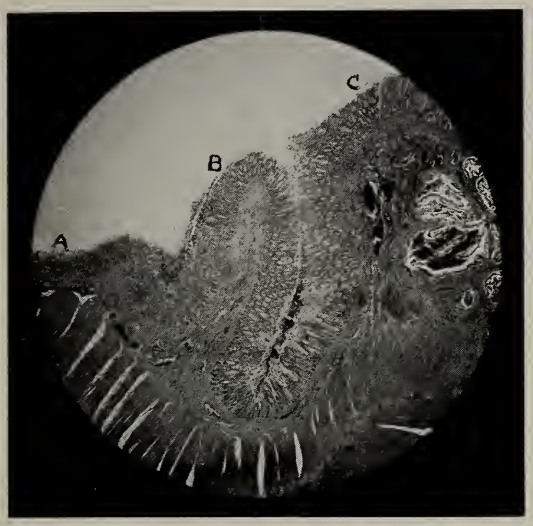


Fig. 3. Photomicrograph through the tissue bordering the rectosigmoid carcinoma removed from the patient in Case 2. It will be noted that in the vicinity of *A* the mucous membrane is normal, while in the vicinity of *B* there is a marked hypertrophy with piling up of the mucous membrane. A biopsy is not infrequently secured from this ring of hypertrophied mucous membrane about the neoplasm, and may show no cancer. Carcinomatous tissue will be seen beneath the mucous membrane in Area *C*.

excavating ulcer with firm raised borders which had completely encircled the bowel (Figure 4). Microscopic examination of a biopsy from the border of this area showed it to be an advanced adenocarcinoma. Resection was performed, and it is now one and one-half years since operation and the patient has remained well. Rankin, Bargen and Buie,[14] and Hirschman[7] have published illustrations similar to Figure 4.

### Differential Diagnosis

There are other conditions which may simulate large bowel carcinoma. The most important of these are: tuberculosis; diverticulitis; segmental ulcerative colitis; syphilis; chronic appendicitis. Each of these conditions may cause a chronic to an acute inflammatory reaction in a segment of the large bowel, giving rise to a palpable mass, with varying degrees of tenderness, pain, and obstruction. A benign polyp may also be mistaken for malignancy. The expert roentgenologist can go far in differentiating these lesions. In some cases a positive diagnosis cannot be made until the tumor is removed. We need not worry too much, however, regarding the differential diagnosis, since the important thing is to suspect the presence of malignancy.[16] Once suspected, modern diagnostic methods must be employed with patience and perseverance until

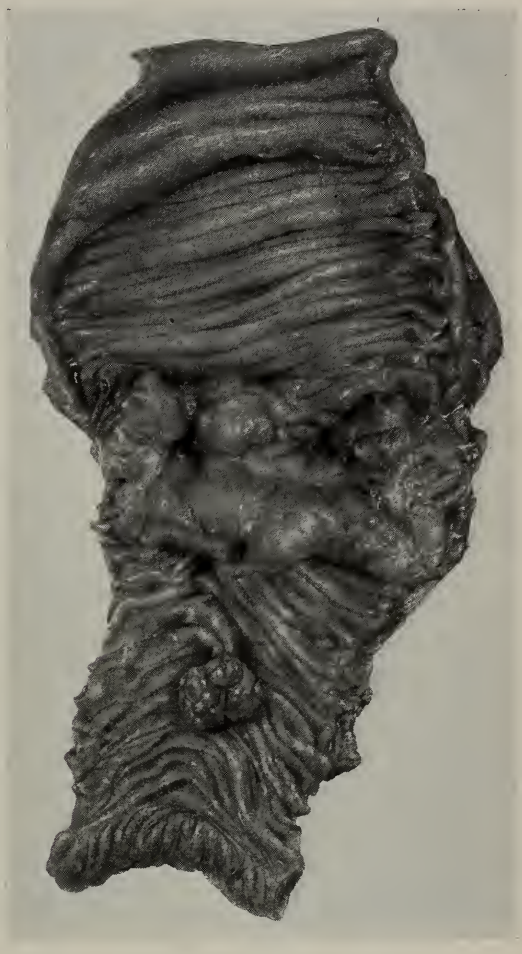

Fig. 4. An annular carcinoma of the rectosigmoid with a polyp distal to it. At the time of the first proctoscopic examination the patient was uncoöperative and the scope could not be passed beyond the polyp. A biopsy taken from it revealed it to be a benign adenoma. On re-examination the scope was passed beyond the polyp and a positive biopsy secured from the margin of the ulcerated area.

the presence or absence of malignant disease is definitely determined.

There were 6,000 deaths from cancer last year in the State of Michigan.[19] This is a terrible toll and approximates the total number of deaths from tuberculosis, appendicitis, and automobiles combined.[15] It is further estimated that there are three living cancer cases for each death.[15] Thus, the total of living cancer cases in Michigan today number 18,000 or approximately three for every physician in the state. One appalling fact stands out, that over two-thirds of this group of individuals are doomed to die of their malig-

nancies, without ever entering a hospital, many of them without a diagnosis having been made until the time of death, and all of them without benefit of any curative treatment whatever. Of the remaining 30 per cent comprising the group which will find their way into hospitals, half will have passed into the advanced stage of malignant disease and be already doomed. Only 15 per cent of the total will be seen sufficiently early to effect a cure or prolong life.

Here indeed is an unexplored medical frontier. The development and standardization of various surgical procedures which enable the modern surgeon to effect a cure in a large percentage of operations for cancer, are of little avail if 85 per cent of these cases are either never seen by him, or not seen until they have developed widespread malignant disease.

**Certain it is that any improvement in this unhappy picture will come not only through education of the general public regarding the danger signs of early malignant disease, but also by making ourselves cancer-conscious physicians.**

We must be alert to the early symptoms of malignancy, and so far as the large bowel is concerned, we must make a painstaking purposeful examination in those individuals with vague abdominal complaints, especially when accompanied by some change in bowel habit. We must keep in mind that a negative examination does not rule out malignancy. A negative digital or proctoscopic examination may mean a growth higher up, and a negative biopsy may mean that the section has not been taken from the proper area. The possibility of a benign polyp and a malignant lesion present at the same time must be remembered. A negative barium enema must be repeated with especial care being taken to watch the progress of the enema both in the oblique and the lateral, as well as the anteroposterior view, especially in those areas where there is a possibility of a loop of normal bowel filled with barium being superimposed so as to obscure the filling defect of a malignant lesion.

**Carcinoma of the large bowel, as malignant disease elsewhere, is curable if found early. The lesson of early diagnosis is not only an important one to impress upon the layman, but upon the physician as well.**

The suspicion that malignancy may be present should afford adequate stimulus for careful study, and this study ought to be painstakingly performed so that the malignant lesions may be discovered early enough to permit complete eradication.

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### NATIONAL PHYSICIANS' COMMITTEE

Two years of aggressive effort in defining and clarifying the issue (political control of medicine), in unifying the profession and informing the public has produced spectacular results.

In his speech on October 31 at Bethesda, Maryland, dedicating the National Institute of Health, President Roosevelt said:

"Neither the American people nor their government intend to socialize medical practice any more than they plan to socialize industry. In American life the family doctor, the general practitioner, performs a service which we rely upon and trust.

"No one has a greater appreciation than I of the skill and self-sacrifice of the medical profession. And there can be no substitute for the personal relationship between doctor and patient which is a characteristic and a source of strength of medical practice in our land."

On September 16, in Kansas City, Missouri, Mr. Wendell Willkie said:

"There is no one to whom socialized medicine is more repugnant than it is to me. I believe in the skill that is developed by the competitive system."

# Surgical Diseases of the Colon

## Diagnosis and Treatment

By Clark D. Brooks, M.D., F.A.C.S. and
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■ CARCINOMA of the colon comprised about ninety per cent of the surgical lesions of that organ, until about five years ago, as found in our previous series. Since that time there has been a gradual increase in the inflammatory lesions, especially regional colitis and regional ileitis, the latter with extension into the colon. We know of no definite reason for the increase of these particular lesions. There has certainly been no increase in the amount of roughage which our diets contain to account for the sharp numerical rise in the inflammatory group. The present-day overuse of vitamins might be blamed for this, but in any case, whatever the cause, it affects the entire population of the country, for reports of an increasing incidence of the conditions reach us from all sides.

### Differential Diagnosis

Owing to the irregularity and inconsistency of symptoms, the diagnosis of carcinoma of the colon from the clinical history and physical examination is often impossible. Some patients, when first seen with acute obstruction, give absolutely no symptoms in their past history referable to this disease. Others complain of no symptoms except weakness or loss of weight; and in many cases secondary anemia of unknown origin is the single clue. Symptoms, such as blood in stools, constipation, obstipation, diarrhea, and bloating, are not constant, as will be observed in the résumé of symptoms of this series.

**Rectal, proctoscopic and x-ray examinations are the most reliable diagnostic procedures and are indicated early in any case presenting one or more of the suggestive symptoms.**

*Regional Colitis.*—The most important lesions to be differentiated from those of carcinoma of the large bowel are regional colitis, regional ileitis and inflammation of the diverticulæ of the sigmoid.

**Patients with regional colitis present a history of the passage of mucous or blood or a combination of both, early in the disease, but usually by the time the patient is seen there may be a definite tumor mass present due to a thickening of the bowel wall from the inflammatory condition.**

The barium enema x-ray shows the presence of this tumor mass, along with a definite, uniform narrowing of the lumen which may, in many instances, be difficult to differentiate from a carcinomatous lesion on account of its likeness to the napkin-ring type.

*Regional Ileitis.*—Individuals with regional ileitis usually have an increase in the number of daily stools and a change in the character of the stool.

**Cramping pain and bloating appear with the progressive narrowing of the lumen of the ileum due to the inflammation present.**

The barium enema is first given, to rule out the possibility of a lesion of the large bowel, followed by the gastro-intestinal series. The passage of the barium through the affected area reveals the definite narrowing diagnostic of this condition.

In both regional ileitis and colitis, fever and leukocytosis are higher and more constant than in malignant growths, while secondary anemia is not so marked.

*Diverticulitis.* — Patients with diverticulitis have pain and a passage of mucus and blood per rectum, and possibly a change in the character of the stool due to the hyperactivity of the lower segment of the bowel. The tenderness, while usually in the lower left quadrant, may be more toward the midline in many cases.

**It is fortunate that the pain, tenderness and rigidity of diverticulitis ordinarily occurs on the left side of the abdomen. When it does manifest findings around the midline or even in the right lower abdomen, difficulty in differentiating it from appendicitis is evident, and the diagnosis often cannot be determined until operative exploration.**

We hesitate to order a barium enema x-ray examination during the acute phase of diverticulitis, as there is a possibility of rupturing the inflammatory area.

Many cases of chronic interstitial contracting diverticulitis simulate malignancy both on x-ray findings and appearance at operative exposure. This condition, like regional ileitis and colitis is increasing in frequency in the last few years.

*Intussusception.* — Intussusception occurred three times in our last series of one hundred, two cases being children and one an adult.

**It can usually be diagnosed by the symptoms of abdominal pain, passing of mucus or blood in stools, diarrhea, the presence of abdominal mass, and an x-ray barium enema.**

Other more or less important lesions to be included in the differential diagnosis are internal and external hernia, benign tumors and strictures, ulcerative colitis, adhesions and bands encircling the bowel or otherwise impinging upon the lumen, tuberculosis, volvulus, mesenteric thrombosis and embolism, Hirschsprung's disease, imperforate anus in infants and polyposis. While some of these conditions do not present themselves as often in the acute or chronic abdomen, they must always be kept in mind in our differential diagnosis.

### Pre-operative Preparation

*Preliminary Treatment.*—The patient with a lesion of the colon is always either acutely or chronically obstructed. In the case of the chronically obstructed, there is sufficient time for proper preparation. Such a patient is usually suffering from a secondary anemia and it is of greatest importance that he be given blood preoperatively. In hospitals maintaining a blood bank this is a simple procedure, but no matter how much difficulty this entails, it should be given first consideration. Supplementary to the giving of blood the patient should also be given an adequate preparation with glucose or saline solutions intravenously. It has also been our practice to give colon immunogen, subcutaneously, in graduated doses. This procedure may be of doubtful value but we feel that a certain degree of immunization is thereby obtained. More recently, with the advent of sulfanilamide therapy, we have been giving this drug pre-operatively in cases of chronic obstruction, mainly because of its efficacy in the treatment of streptococcus and colon infections. Finally, cevitamic acid, in an adequate dose is given three times a day, because of the excellent results obtained in the healing of wounds following the use of this vitamin substance. These drugs may be given parenterally should the patient be unable to retain medication by mouth. The diet, pre-operatively, in these patients is limited to high caloric fluids. In order to thoroughly rid the bowel of its fecal contents, citrate of magnesia in adequate dosages is used, supplemented by daily enemata.

*Acute Obstruction.*—The acutely obstructed case presents a somewhat different problem of attack, although we feel that the patient is entitled to as much pre-operative support as the time factor will permit. Every case of this type should have a flat plate x-ray of the abdomen and, if possible, a barium enema. In all cases in which it is necessary to open the bowel a prophylactic dose of tetanus, B. Welchii and B. Perfringens is given. Intravenous solutions of glucose and saline are given slowly in as large amounts as possible. We prefer the use of a five per cent glucose solution in physiological saline for this purpose. Usually the case of acute obstruction is given blood during the operation, and here again the use of the blood bank plays an important rôle.

### Type of Operation

A two-stage operation is the one of choice for lesions of the right side of the colon. There is an increased danger of infection should the one-stage procedure be carried out, and we feel that the patient builds up a certain amount of immunity following the first stage, or if this is not possible, the simple ileostomy is performed. After a suitable time the second stage is done, which consists of a resection of the entire right side of

the colon up to and including the hepatic flexure. Had the anastomosis between the ileum and transverse colon not been performed in the first instance, this is also done as a part of the same procedure.

We prefer the Paul modification of the Mikulicz' operation, in lesions of the upper sigmoid, descending colon and the transverse colon. The lesion is brought into view and an adequate wedge of mesentery removed. The adjacent walls of the gut are then approximated, below the lesion, with an intestinal suture, using an atraumatic needle. It is of greatest importance that enough of the bowel is freed so that there is no tension on the loop which is brought up to the surface of the abdomen, since any drag upon this portion will give a poor result. The bowel, including the lesion, is then brought up and the wound closed in layers about it, the lesion either being left intact, or resected above the abdominal wall, leaving forceps on the ends of the colon for two or three days. After the forceps are removed the proximal loop is irrigated with half parts of saline and olive oil, and when gas and feces are passing well, a Mikulicz clamp is inserted into each loop and the partition crushed.

This procedure usually takes four or five days to accomplish, the fecal current then passing into the distant loop. Of greatest importance is the cutting of the spur to a sufficient depth to allow the free and unobstructed flow of the fecal current. If this is properly done, we have found that the wound closes spontaneously in about half of the cases and secondary closure is not necessary. Should secondary closure be necessary, it is not done before six to eight weeks postoperatively.

**We believe that lesions of the lower sigmoid, the rectum and the anus require a radical type of procedure, no matter how small the lesion. It has been definitely shown that these lesions metastasize early to the surrounding lymph nodes, so we prefer the abdominal perineal resection with the removal of all the nodes in the pelvic area. Quite naturally, before this procedure is carried out a thorough examination of the liver is made at the time of operation. Should this organ show evidence of metastasis, a palliative colostomy is in order.**

Regarding diverticulitis, we never operate unless there is perforation with abscess, obstruction is present, or the condition simulates acute appendicitis so closely that a diagnosis cannot be made without operative exploration.

### Postoperative Treatment

Utilization of frequent blood chloride and serum protein tests is of great help in maintaining proper postoperative fluid balance, and indicating when blood transfusions are necessary. We use 5 per cent glucose in saline or water, by slow intravenous drip method. A blood transfusion is given as routine either during or shortly after the operation, and repeated as frequently as necessary. Concentrated vitamin C is given routinely, either parentally or by mouth during the full convalescent stay in the hospital. A Levine tube with suction is used as a prophylactic measure to prevent distention. As soon as convalescence is satisfactory, a high caloric, high protein diet is given.

The care of the skin around a colostomy opening is important. It should be protected by cellophane or oiled silk and a generous layer of zinc oxide ointment or a paste of bismuth and castor oil (equal parts). We object to the close fitting colostomy bags, as they are unsanitary and exert too much suction on the bowel. Our patients with permanent colostomies are trained to irrigate the bowel with saline solution, and use a protective rubber or metal cup belt, with vaseline around the bowel, and cotton or cellucotton dressings. The character of the stool may be regulated by diet and the use of lubricants, or paregoric and kaolin mixtures, as the case demands.

Following abdominal perineal resections, the cavity remaining after removal of the rectum is treated with irrigations of 2 per cent urea solution. This fills in quite rapidly, especially since the use of vitamin C.

Deep x-ray therapy, either pre-operative, between stages in a two-stage operation, or postoperatively, is indicated, especially in the advanced malignant conditions of the colon.

### Last 100 Colon Operations

| *Diagnosis* | |
|---|---|
| Carcinoma | 78 |
| Regional ileitis and caecitis | 6 |
| Obstructing diverticulitis of sigmoid | 6 |
| Ruptured diverticulitis of sigmoid | 3 |
| Intussusception diverticulitis of sigmoid | 3 |
| Tubercular ileitis and caecitis | 1 |
| Gangrenous epiploica sigmoid | 1 |
| Volvulus of ileum and cecum | 1 |
| Fecolith in cecum | 1 |

*Operation*

| | |
|---|---|
| Modified Mikulicz resection | 28 |
| Colostomy | 20 |
| 1-stage abdominal perineal resection | 13 |
| 2-stage abdominal perineal resection | 5 |
| 2-stage right colon resection | 6 |
| Cecostomy | 5 |
| End-to-end resection | 4 |
| Enterostomy | 2 |
| Low resection of rectum | 4 |
| Ileo colostomy | 4 |
| Resection large cancer polyp per rectum | 1 |
| Drainage for ruptured diverticulitis | 3 |
| Relief of intussusception | 2 |
| Relief of intussusception and enterostomy | 1 |
| Removal fecolith in cecum | 1 |
| Removal gangrenous epiploica | 1 |

CARCINOMA CASES

*Sex*

Men—34
Women—44

*Age*

Youngest—28 years
Oldest—85 years
Average age—57 years

*Pathology*

| | |
|---|---|
| Adenocarcinoma | 75 |
| Polypoid carcinoma | 1 |
| Colloid carcinoma | 1 |
| Cylindrical cell carcinoma | 1 |
| Extension from cancerous stomach | 1 |
| Extension from cancerous ovary | 2 |
| Extension from cancerous uterus | 1 |

LOCATION

| | | | |
|---|---|---|---|
| Sigmoid | 39 | Transverse | 4 |
| Rectum | 14 | Splenic | 2 |
| Cecum | 11 | Hepatic | 1 |
| Descending | 6 | Ascending | 1 |

SURGICAL TYPES

| | |
|---|---|
| Inoperable cases | 25 |
| 7 with liver metastases | |
| 2 perforated | |
| Acute obstruction cases | 19 |
| 2 perforated | |
| | 44 |
| Elective or favorable cases | 34 |

SYMPTOMS—78 CARCINOMA CASES

| | |
|---|---|
| Pain | 57 |
| Secondary anemia | 41 |
| Blood in stools | 31 |
| Nausea and vomiting | 29 |
| Bloating | 29 |
| Constipation | 28 |
| Weakness | 21 |
| Loss of weight | 19 |
| Diarrhea | 18 |
| Obstipation | 17 |
| Mass in abdomen | 11 |
| Tenesmus | 9 |
| Small stools | 6 |

MORTALITY

Inoperable carcinoma and obstructive carcinoma cases (20 out of 44)
Favorable carcinoma cases (7 out of 34)
Non-malignant cases (3 out of 22)
1 ruptured diverticulitis with peritonitis
1 obstructing diverticulitis with peritonitis
1 intussusception with mesenteric thrombosis

## Summary

1. There is definite progress in the diagnosis, technic and after results of surgery of the colon.

**2. The early utilization of careful rectal, proctoscopic and x-ray examinations will establish an earlier diagnosis, improve the operability, and reduce the frequency of acute obstruction.**

3. The incidence of inflammatory lesions of the colon is increasing.

4. Extensive pre-operative preparation is essential.

5. The more frequent use of blood transfusions is advocated.

6. The use of stage operations, radical resections and preference of the Mikulicz-Paul operation over primary anastomosis, is advised.

7. The technic of postoperative care, with especial reference to the care of the colostomy, is described.

8. A tabulated résumé is given of our last series of one hundred colon cases.

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**INDUSTRIAL HYGIENE**

The University of Michigan takes pleasure in announcing its Second Annual Conference on Industrial Hygiene to be held Thursday, Friday, and Saturday, *January 23, 24 and 25, 1941,* in the Amphitheater, Horace H. Rackham School of Graduate Studies. The purpose of the Conference is to review the past year's progress in Industrial Hygiene and to point out and discuss some of its trends. The Conference has in mind the bringing out of the notion of the unity of industrial hygiene including its personnel and activities and the very close interrelationships of industrial hygiene to the modern public health movement and to the health sciences professions, with particular reference to the medical profession.

The list of speakers includes representatives from each of the special fields of industrial hygiene; namely, medicine, engineering, nursing and laboratory work. The Conference should prove to be of interest and value to *physicians, engineers, dentists, nurses, public health personal* and *industrial personnel managers.* The University of Michigan cordially invites members of these professions to attend the Conference. *No registration fees are stipulated.*

# Clinico-Pathological Conference

Wayne University College of Medicine

Paul H. Noth, M.S., M.D.
Assistant Professor of Medicine

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Associate Professor of Pathology

C. McD., white, female, aged fifty-six, was admitted to the hospital September 21, complaining of jaundice of seven months' duration, recurrent attacks of abdominal pain and swelling of the same duration, and swelling of the ankles of three weeks' duration.

*Present Illness.*—The patient was well until about one year before admission when she began having a dull, steady, aching pain in the right sub-costal region anteriorly. This pain would come and go without apparent relation to meals, bowel habits or exercise. About nine months prior to admission she noted some swelling in the abdomen which lasted about a month and then subsided. There were no other symptoms at this time except for the dull, aching pain. About seven months ago the patient had her first attack of colicky pain. This was located chiefly just above the umbilicus on either side of the mid-line, and radiated back to the tip of the right scapula. It lasted about ten minutes, was severe enough to double the patient up and was accompanied by nausea and vomiting. She became jaundiced shortly after this and also noted recurrence of the abdominal swelling. The jaundice persisted for about seven weeks and then, according to the patient, completely disappeared. About a month following this she had another similar attack and since then she has been constantly jaundiced to some extent, although the degree of jaundice has fluctuated considerably. During these attacks the urine was dark in color and the stools light. Subsequently there was considerable variation in the color of the urine and stools. About three weeks before admission, the patient experienced the third attack of severe, cramping abdominal pain which was followed by itching of the skin and also swelling of the ankles. At this time there was an increase in the amount of the swelling of the abdomen. Throughout the illness there had been a moderate amount of nausea and bloating with intolerance to sweets, cabbage and fatty foods. For the past two years the patient had eaten practically no meat because of the alleged presence of hypertension. Her weight decreased from 237 pounds to about 215 pounds with an increase to the original weight in the three weeks preceding admission. During the six weeks preceding admission there had been noted drowsiness and extreme fatigue. There was no history of qualitative food distress, indigestion or abdominal pain prior to the present illness. No history of venereal disease, alcoholism or ingestion of any type of medicine prior to the present illness. No cardio-respiratory or genito-urinary symptoms.

*Past History.*—No severe illnesses. No operations or injuries. History by systems essentially negative except for "high blood pressure" with a systolic level said by the patient to be 270 in 1936, accompanied by hot flashes, fatigue and drowsiness but unaccompanied by edema, cough or appreciable dispnea. She was relieved of these symptoms after being placed on the low protein diet. Menstrual history normal, with menopause at age of 41.

*Family History.*—Mother and father died of pneumonia at the ages of fifty-eight and sevently-eight, respectively. Two brothers and one sister living and well. One sister died from a stroke at the age of fifty-two. No history of cancer, tuberculosis or diabetes.

*Marital History.*—Married at thirty-eight, divorced at forty. No pregnancies. Former husband living and well.

*Occupational History.*—Housework.

*Physical Examination.*—Revealed a well-developed, obese, white female markedly icteric but in no apparent distress. Temperature 98.2°, pulse 80, respirations 16. The ocular pupils were equal and reacted to light and upon accommodation. The fundi showed normal discs, slight sclerosis and narrowing of the retinal arterioles. No hemorrhages or exudates. Examination of the ears, nose, throat and neck negative. The lungs were clear. The heart was of normal size. The cardiac rhythm was regular and the heart sounds of normal quality. There was a soft systolic apical murmur. The blood pressure on several occasions varied between 154/97 and 122/80. The abdomen was moderately distended with shifting dullness in the flanks. No palpable organs. There was no costo-vertebral angle tenderness. There were several purpuric spots in the skin of the abdominal wall. There was marked pitting edema of the lower extremities. The tendon reflexes were equal and active.

### Laboratory Tests on Admission

Urinalysis—specific gravity 1.010, sugar 0, albumin 0, WBC occasional. Blood: Hemoglobin 11.0 G., RBC 3.64 millions; Color Index 1.0. WBC 10,500, Neutrophils 70 per cent (Filamented 62 per cent, Non-filamented 8 per cent), Lymphocytes 8 per cent, Eosinophils 2 per cent. Kline and Kahn positive. Icteric index 60. Blood cholestrol 171 mg. per cent. Serum albumin 2.9 G. per cent; serum globulin 2.8 G. per cent. Urine for urobilinogen—highest positive dilution = 1-50. Gastric analysis: free HCl 0. Total acidity varied from 4 to 8 degrees. No occult blood.

*Subsequent Laboratory Tests.*—Urines for urobil: (highest positive dilutions) 9/26—1-30; 9/27—1-70; 9/28—1-20; 9/29—negative; 9/30—negative; 10/2—negative; 10/3—negative; 10/4—1-50; 10/6—negative. Subsequent Urinalyses—specific gravity varied from 1.010 to 1.020, 0 to trace of albumin. Urinary sediment (uncatheter-

ized specimens) contained occasional to 50 WBC, except on two occasions below 10. The last urinalysis was obtained on 10/7. Icteric indices: 9/26—60; 9/30—53; (van den Bergh direct immediate strong, bilirubin 4.4 mg. per cent); 10/19—48. Stool examination; 9/27—urobilin, occult blood 0. Blood ureas: 10/10—26; 10/20—32. Hippuric Acid Test: 9/27—0.50 G. benzoic acid recovered. 10/6—no hippuric acid precipitated. 10/5—galactose tolerance test (40 G. galactose oral feeding) 2.47 G. recovered. 9/30—serum phosphates 2.3 units, serum phosphorus 5.2 mg. per cent. Repeat Kline—9/27 negative. Prothrombin times: 9/29—25 seconds; 10/3—42; 10/6—44; 10/10—25; 10/13—32; 10/13 (5½ hours after vitamin $K_5$) 34; 10/15—(after second dose $K_5$) 25; 10/19—35; 10/20—31. (Normal prothrombin time with method used is 13 seconds.) 10/16—Ascitic fluid: specific gravity 1.014, albumin 8.4 G/liter, total cells 190, WBC 56, 56 per cent lymphocytes, 44 per cent polymorphonuclear. Some mesothelial cells.

### Clinical Course

The patient's temperature remained at normal levels, except for a slight rise on 10/15 to 101°, until 10/20 when it rose to 102°, reaching the height of 103° on 10/21. The pulse rate ranged between 80 and 100 except for the terminal rise. Respirations varied between 20 and 25 except for terminal rise to 35. During the first part of her hospital stay the patient was eating well and feeling quite well generally. She was placed on a high carbohydrate, low fat diet which she took without difficulty. On 9/29 bile salts and vitamin B therapy was started. The patient received two capsules of dessicated bile three times daily. Starting 9/29 one capsule napthoquinone (dry) three times daily. 10/4 napthoquinone in oil three capsules daily substituted. 10/13—4 mgs. vitamin $K_5$ I.V. Starting 10/17 natural vitamin K eight capsules daily and 4 mgs. vitamin $K_5$ I.V. daily. On 10/10 it was noted that the patient had become lethargic and disoriented. On 10/15 there was an increase in the amount of ascites and the patient complained of considerable pain in the abdomen. On 10/16 the abdominal paracentesis yielded about 1700 c.c. of slightly cloudy, straw colored, odorless fluid. On 10/20 the heart was found to be enlarged and the cardiac sounds were of poor quality. In spite of digitalization the patient became progressively more drowsy and weak and expired on 10/21.

## Discussion

Dr. Douglas Donald.—There are a number of significant facts in the history of this patient's illness.

**One cannot be certain whether the abdominal distension noted early in the course of the disease was due to ascites or to gaseous distension. The attacks of severe abdominal pains are quite typical of biliary colic because of the location and radiation of the pain and in spite of the fact that they were of short duration. The history of intolerance for fatty foods, the occurrence of light stools and dark urine at the times of the attacks of pain, the pruritus and the fluctuation in the intensity of the jaundice are all suggestive of obstructive jaundice due to common duct stone.**

The cause of the edema of the ankles which occurred following the last attack of pain is not clear. The extreme fatigue and tendency to drowsiness are suggestive of the presence of severe hepatic damage. In other cases of hepatic insufficiency these toxic symptoms may be replaced by mania or delirium. Their exact etiology is unknown. The past history is not remarkable except for the alleged presence of a marked hypertension. In view of levels of blood pressure noted during the patient's hospital stay and the absence of findings of cardiac disease, I would be inclined to doubt the correctness of this part of the history although such fluctuations in blood pressure occur occasionally.

The findings on physical examination do not suggest that cardiac embarrassment was present. The soft apical murmur in the absence of other cardiac findings is not significant, and is probably, in view of the anemia, a hemic murmur. The other physical findings of ascites and purpuric skin lesions indicate severe hepatic damage, but like the right upper quadrant tenderness, are of little value in the differential diagnosis between various etiologic types of disease of the liver.

The initially positive Kline and Kahn tests of the blood with later reversal to negative of the Kline test must be evaluated cautiously in the presence of jaundice which may produce falsely positive tests. The subsequent negative Kline test as well as the clinical picture makes me feel that syphilis, if present, is not an important factor. The urobilinogen levels in the urine fluctuated between a positive test in a dilution of 1-70 and several negative tests. The former reading is definitely indicative of hepatic damage, and the periodic negative tests probably indicate an intermittent biliary tract obstruction. The finding of urobilinogen in the stools excludes complete biliary tract obstruction with greater finality than the presence of urobilinogen in the urine since, in some in-

stances of complete biliary tract obstruction, it is believed that the biliary pigment may be converted into urobilinogen in infected dilated biliary ducts, be absorbed and excreted in the urine. The abnormal hippuric acid test and the normal galactose tolerance test illustrate the well-known fact that it is difficult to measure the function of such a complex organ as the liver which possesses such remarkable powers of regeneration.

The patient's down-hill clinical course is most suggestive of increasing hepatic insufficiency. The evidence of cardiac failure which appeared terminally are frequently observed in similar cases and do not respond to digitalis therapy.

**What shall we consider as possible diagnoses in this case? The types of extra-hepatic obstructive jaundice which should be mentioned are those due to choledocholithiasis, carcinoma of the bile ducts, or carcinoma of the pancreas; the types of intra-hepatic jaundice which should be mentioned are toxic hepatitis, infectious hepatitis, cirrhosis of the liver and diffuse involvement of the liver by primary or metastatic carcinoma.**

Of those possibilities, choledocholithiasis best explains the history of biliary colic, the intermittency of the jaundice, and the appearance and disappearance of urobilinogen in the urine. The latter two findings are seldom seen in carcinoma of the pancreas or bile ducts in which the jaundice is usually persistent, and the disappearance of urobilinogen from the urine is usually not followed by its reappearance. The evidences of severe hepatic damage seen in this case, namely the ascites, purpura, and drowsiness, and the long course of the illness make me feel that in addition to the obstructive jaundice caused by a common duct stone there is present also a secondary biliary cirrhosis.

Dr. Edward D. Spalding.—I agree with Dr. Donald's diagnosis of the chief diseases present. I would like to emphasize the probability that this patient had in addition hypertensive cardiovascular disease. A woman who weighed 237 pounds, and had a history of hypertension is not likely to have a normal cardiovascular system and the findings of ascites, peripheral edema, and terminal enlargement of the heart all could be interpreted as indicating the presence of hypertensive heart disease with cardiac failure.

**If digitalization was going to be instituted it would have been more helpful to do so before the terminal stage. It would also seem to me that as judged by this case summary, too much attention was paid to vitamin K and not enough to the danger of too great delay in operation which, if performed at the time the patient was doing well, might have stemmed the tide which carried her along to exitus.**

Dr. Saul Rosenzweig.—The two previous discussants have made out a very good case for the presence of a common duct stone to explain the jaundice which this patient had. I agree with Dr. Donald that she had in addition severe hepatic damage as the cause of the edema and ascites which were present. The long intermittent course is an ideal set-up for the development of a chronic cholangitis with a resulting biliary cirrhosis. The alleged previous severe hypertension might have been due to nephritis, and occasionally one sees a patient who has severe liver damage in whom autopsy reveals the primary cause to be the renal pathology. However, in this case my diagnosis corresponds with that of Dr. Donald.

Dr. Robert Schneck.—I don't see how we can avoid a diagnosis of common duct stone in this case. I also agree that this patient had cirrhosis of the liver. I don't think we can say that this is entirely secondary to the gall-bladder disease because of the early occurrence of ascites and the absence of fever. Further, patients with biliary cirrhosis have large livers whereas this patient had a small liver. Therefore, I believe that a double diagnosis of portal cirrhosis and common duct stone is the correct one.

Dr. Sol Meyers.—The history of biliary colic seems quite definite in this case, but the subsequent course of events is not entirely clear.

**The occurrence of swelling of the abdomen presumably due to ascites soon after the attack of colic is not what one would expect to occur**

**immediately after the impaction of a stone in the common duct. Biliary cirrhosis frequently occurs in patients with calculous biliary tract obstruction and may then produce all the findings seen in advanced portal cirrhosis such as ascites, anemia, or drowsiness. However, it does not develop with sufficient rapidity so that it can be considered as the cause of the ascites in this case.**

Further, as Dr. Spalding has pointed out, it is unusual for these patients to be afebrile as this patient was for about three weeks of her hospital stay. There is usually an associated cholangitis which, if it does not cause the typical recurrent chills, at least causes some fever. Biliary cirrhosis is divided into two types, the primary or so-called Hanot's cirrhosis and the secondary or Charcot's cirrhosis. The former is characterized by a large liver, large spleen, jaundice and paroxysms of fever accompanied by leukocytosis occurring usually in a younger individual. Certainly that is not the picture here. The Charcot type is usually characterized by the presence of recurrent chills and fever, a chronic jaundice which fluctuates in intensity, varying degrees of enlargement of the liver frequently not associated with splenomegaly, and leukocytosis.

**In this case because of the early appearance of ascites and the absence of fever and leukocytosis it is questionable whether we can be safe in assuming that a secondary biliary cirrhosis is present. Therefore, we must consider other types of hepatic disease.**

Malignancy of the liver, either primary or secondary, is unlikely because of the presence of obesity, and the fluctuation in two important symptoms: namely, swelling of the abdomen, and jaundice. Portal cirrhosis is an unlikely possibility because of the presence of severe colicy pain and the early appearance of jaundice. Syphilitic cirrhosis is also a possibility but there are no conclusive evidences of its presence; that is, the serologic tests are contradictory, there is no other evidence of syphilis, and the shape of the liver is not grossly nodular as one would find in a hepar lobatum. Also the rapid downhill course is not usually seen in syphilis of the liver, and the absence of splenomegaly is another point against it.

**In the condition called mixed cirrhosis we can get the picture described by this patient's illness. Involvement of the portal system, similar to that seen in ordinary portal cirrhosis and responsible for the ascites, is combined with involvement of the biliary duct system in the liver and is the cause of jaundice.**

This explains the co-existence of recurrent jaundice with evidence of portal obstruction such as ascites. This really amounts to a double diagnosis, but I believe it is the most likely one in this case. I realize that only a small fraction of patients with cirrhosis of the liver have biliary colic. On the other hand I have seen patients with typical biliary colic in whom no stones were found.

Dr. A. Hazen Price.—The history of the abdominal pain which this patient experienced is suggestive of biliary colic, but could well, especially in view of its short duration, be due to pylorospasm. With this in mind I believe that all the various findings in this patient's history and examination are best explained by a chronic hepatitis with jaundice. It is stated that she felt quite well during the first part of her hospital stay, and therefore, it may be considered that she took a sudden turn for the worse and went down-hill rapidly after that.

I am inclined to feel that this was a cardiac death, possibly due to coronary thrombosis.

### Roentgenologic Findings

(Reported after clinical discussion)

A flat plate of the gall-bladder area showed no evidence of opaque calculus. A gastro-intestinal series showed that the stomach filled well, revealing no defects in the gastric outline. There was evidence of pressure on the upper one-third of the stomach from the splenic area. The duodenum was visualized showing no irregularities in contour. There was no displacement of the duodenal looping. The stomach was empty at five hours with the head of the meal in the cæcum. Twenty-four hour examination was negative.

### Pathologic Findings

*Final Diagnosis.*—(1) subacute yellow atrophy of the liver; (2) splenomegaly; (3) anasarca; (4) bile nephrosis; (5) myocardosis; (6) obesity; (7) fatty atrophy of the pancreas.

Toxic hepatitis might be substituted for the first diagnosis. The basic pathology is necrosis of the liver occurring on a small scale over a considerable period of time. The liver in this case weighed 1220 grams. The surface was irregular due to numerous depressions, alternated by elevations over the entire surface of both lobes. In some places, however, the capsule was smooth. The cut surface was yellow and the consistency soft. There were obvious areas of regenerative hyperplasia. The gall bladder and extra-hepatic biliary tract were normal. In the liver sections there was no actual necrosis. Evidences of severe parenchymal destruction were present, however, in the form of areas of lobular deficiency measuring from a few millimeters to several centimeters in diameter in which only bile ducts remained. In these areas there was infiltration of inflammatory cells, chiefly lymphocytes, and evidence of repair consisting of capillary proliferation and connective tissue production. At the edges of such areas, the lobules were only partially destroyed. In another area there was nodular reparative hyperplasia. In some areas the parenchyma had remained intact.

The life history of such a lesion would be that small areas of necrosis had been produced as a continuous or recurrent process over a considerable period of time with enough functioning liver parenchyma being left intact to be compatible with life. This situation is in contrast to acute yellow atrophy where necrosis is much more extensive and the clinical course is only a few days. The progress of this patient's disease was much slower than in the average case of subacute yellow atrophy, the difference being wholly one of severity or extensiveness of the necrosis. Had necrosis ceased at any time, complete healing might have occurred and the lesion known as toxic cirrhosis then might have developed. The etiology in this case was unknown but the pathology was more characteristic of chemical than bacterial damage.

The spleen weighed 710 grams. Hypertrophy was due to engorgement. The kidneys weighed 200 grams each. There was considerable degeneration of the tubular epithelium apparently due to cholemia. Anasarca was evidently the result of hypoproteinemia. Sections of myocardium showed considerable acute toxic degeneration. Each pleural cavity was one-quarter filled with clear straw-colored fluid. The heart weighed 450 grams. The peritoneal cavity contained between three and four liters of transudate.

Dr. Paul H. Noth.—In retrospect there are a few additional comments which should be made concerning this case. While colicy pain in the hepatic area is most characteristically associated with cholelithiasis, it occurs not infrequently in carcinoma of the pancreas and also in various forms of hepatitis. In the latter two diseases it is usually milder in degree and less likely to radiate posteriorly.

**The ineffectiveness of the large amounts of potent vitamin K material in reducing the prothrombin time in this case is noteworthy, and, judged by our experience in similar cases of chronic hepatitis is indicative of severe hepatic damage. In most cases of obstructive jaundice these amounts of vitamin K, particularly $K_5$ given intravenously, have resulted in a prompt fall to normal or near-normal values of the prothrombin time.**

The explanation of this difference in response is that in cases of obstructive jaundice uncomplicated by severe hepatic damage the defect in the clotting mechanism lies chiefly in the lack of sufficient absorption of fat-soluble vitamin K from the intestinal tract due to partial or complete exclusion of bile which is necessary for proper absorption of this and other fat-soluble substances. On the other hand in the presence of severe damage the liver is largely unable to utilize vitamin K in the formation of prothrombin even when it is given parenterally. Therefore, in a sense, the response of a patient's prothrombin time to vitamin K therapy is a test of liver function having some value as an aid in differential diagnosis between intrahepatic and obstructive jaundice as well as being an index of the degree of complicating hepatitis in patients having known biliary tract obstruction.

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## SECOND ANNUAL CONFERENCE ON INDUSTRIAL HYGIENE, ANN ARBOR, MICHIGAN

### Partial Program

*Thursday, January 23*—Health Promotion in Industry; Industrial Medicine and Other Health Agencies; Studies in Industrial Hygiene; Comprehensive Industrial Hygiene Investigations; Occupational Diseases; Industrial Dermatoses; Pathological Phases of Industrial Diseases.

At the dinner meeting, J. J. Bloomfield, Industrial Engineer, will speak on "Industrial Hygiene in the National Defense Program."

*Friday, January 24*—Symposium on the Medical Service in Industry; The Full-time Industrial Physician; The Part-time Industrial Physician; The Physician in Private Practice; Industrial Nursing Service; The Relation of the Industrial Hygienist to the Industrial Medical Service; Studies in Industrial Hygiene (continued); Engineering Control of Industrial Hazards; The Industrial Health Laboratory; Industrial Legislation;

A special program by the students of the Division of Hygiene and Public Health, University of Michigan, will be given at the dinner meeting.

*Saturday, January 25*—Studies in Industrial Hygiene (continued); Industrial Relations; Development and Practice of Industrial Hygiene in State and Local Health Departments; Section on Industrial Nursing; Section on Industrial Hygiene Laboratory.

UNIVERSITY OF MARYLAND LIBRARY Founded 1813 SCHOOL OF MEDICINE

# N.Y.A. Health Program

President's Page

National defense today is no longer a question of marching men; it is a matter of vocational training for the maintenance of a complete defense program. In Michigan alone, the National Youth Administration is training 30,000 unemployed youths, between the ages of sixteen to twenty-four years and out of school, in manipulative fields. These boys and girls are becoming skilled workers with scores being assimilated in industry every month.

A health examination program for these unemployed out-of-school youths has been developed by the NYA and approved by your State Society. Its objective is to provide a physical examination of all trainees; also to assist in the correction of remedial defects found by these examinations by referring trainees to their family doctors. It is hoped that through this introduction of the trainee to good medical practice, a desire for such service from his family physician will be created and will last throughout his life.

To this end, members of county medical societies are invited to coöperate with the National Youth Administration in its carefully prepared Health Program. It is a practical plan to bring needed health education and assistance to a neglected group, at the most impressionable age of their lives. It is the doctors' opportunity to participate in this program, aimed to help those being trained to productivity and economic rehabilitation.

President, Michigan State Medical Society

# EDITORIAL

Proposed Detroit Medical Center

## DETROIT, A MAJOR MEDICAL CENTER

■ Michigan has appreciated the accomplishments of Dean Norris of the Wayne University College of Medicine and his faculty in their continued advance in medical education.

Now the vision of further advances is becoming a reality.

The newspapers of the state have carried the story of the new medical unit from the first hope of Dean Norris, the active coöperation of the Wayne County Medical Society, and the necessary practical assistance of such men of Knudson, Lescohier, Eamon, Marshall, McMath, Keidan, Henry, and Martha C. Sheldon. The Anderson family, showing the same foresight and enthusiasm they showed in their initial support of Henry Ford, have proved vital factors in advancing this far-reaching program. The Common Council of Detroit lost no time in making the necessary land available.

Already $8,000,000 has been subscribed (to which almost every Detroit physician gave his bit) and the plan is finally expected to enable the construction of a $50,000,000 medical center which will challenge the finest in the world. The greatest coöperation has been obtained from professional, political, and business as well as philanthropic organizations and individuals.

It is hardly necessary to assure Dean Norris and the physicians of Detroit that every practitioner of Michigan rejoices with them in this approaching fulfilment of their desire.

## DR. HOSPITAL?

■ What is a hospital? Of course, primarily a hospital is a building in which nursing and medical care may be given in a more efficient manner than at home. Speaking bluntly, without doctors there could be no hospitals. Yet to a more or less increasing degree, the medical profession, which is the most important part of the hospital set-up, has been subjugated to play a very minor rôle in determining the policies and practical administration of the hospitals. This is especially true in the larger centers.

A perusal of some recent literature seems to establish that the hospital is extending its direction to purely medical subjects. An excursion into the realms of the possible extent of such domination by the hospital boards over the medical profession would be classified as subversive activities by some of these boards. Certainly, the intrusion has increased markedly in the last twenty years and if this is to continue there will be as much obstruction to the private practice of medicine through this domination as through political regimentation.

The solution is easy in theory but difficult in practice. Insistence by the profession of its inherent right to supervise and direct all purely medical problems is essentially all that is necessary. Some of the reasons why it is difficult to establish this right may well be considered even though they may not be entirely uncontroversial.

Most physicians agree that a closed staff is fertile ground for spreading discord among the profession. At least in many cases hospital superintendents will play one staff member against another in order to persuade them into relinquishing some of their inherent rights. One very well known physician stated not long ago that he had to take certain orders of a strictly professional matter from the superintendent of his hospital because if he refused he would be forced to resign and there were ten others ready to step into his place. He realized that maintaining his practice depended to a considerable extent upon the legitimate "advertising" which his position automatically gave him.

It is well known that in those districts in which the physicians have insisted upon open staffs, and fought valiantly to retain the administration of medical problems through their county medical society, division of medical forces has not been possible and the profession has maintained its leadership in medical problems.

Another dangerous precedent is in allowing the appointment of the staff by the superintendent and his governing lay board. It seems uncontradictable that the profession should be able to select its medical leaders more intelligently than a lay board.

Another highly explosive factor is the free and the part-pay clinic. It is safe to say that in most instances the physician who is, after all, the one indispensable factor in providing the service has absolutely no control over what patients may be included, and often but little control over what the treatment should be.

Perhaps the solution is too complex for a local or state movement and it may be that the American Medical Association will be forced into promulgating some definitely constructed principles regarding the rights and privileges of the physician in the hospital.

The trend is dangerous and many besides the alarmists feel it has already reached a serious state.

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### THE PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coördinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American system of democracy.

# MICHIGAN MEDICAL SERVICE

## One Year of Operation Nears

■ FEBRUARY 28 of the New Year 1941 will mark the completion of the first year of operation for Michigan Medical Service. In retrospect, the past year will be outstanding because of the launching of the first voluntary prepayment medical service plan organized under a special enabling act and sponsored by the medical profession.

The organizing, financing, and operation of this medical service program by the doctors of Michigan has set a precedent for the rest of the United States to follow. Medical service plans were in operation on the Pacific Coast and in Canada prior to Michigan Medical Service, but the Michigan plan has paved the way in the development of a medical plan under a special governing law and in the formation of a low-cost Surgical Benefit Plan.

The growth of prepayment medical service plans sponsored by medical societies is indicated by the development of such programs in 21 states. Already 29 medical service plans sponsored by medical societies are in operation.

## Continued Coöperation Needed

At the start of the New Year, it is appropriate to re-emphasize that each individual doctor has to take his share of the responsibility for a successful administration of the medical service program. The Board of Directors, the committees, and the officers in charge of the immediate conduct of the medical plan must have continuous sympathetic coöperation from every doctor who renders services for subscribers.

The proper functioning of the medical service plan, especially for new groups of subscribers, depends on the effort each doctor takes to make the first experience for the patient as a subscriber a satisfactory occasion. Subscribers to Michigan Medical Service are undertaking the responsibility to pay monthly in advance for medical services, in order that they may be assured of such services when needed; and further that prompt payments will be available for the doctor. For these mutual advantages to become realities, it is necessary for the doctor to give attention to the essential procedures, such as the following:

1. *Identification of Subscribers.*—The enrollment of new groups of subscribers each month by Michigan Medical Service means that doctors may constantly expect patients who are subscribers. Therefore, office secretaries should be instructed to ask the patient whether he is a subscriber to Michigan Medical Service and to record his certificate number and the exact spelling of his name from the Identification Card. Observance of this procedure will facilitate authorization for payment of Monthly Service Report bills for services.

## Two Types of Service

2. *Determination of Services.*—The doctor must know the services to which the subscriber is entitled under the medical service plan, in order that proper arrangements may be made with the patient. The new Identification Cards carry *Service No. 2 or 3* to designate the type of services.

*Service No. 2* indicates that the subscriber is enrolled in the complete Medical Service Plan and is entitled to both medical and surgical care in the home, office, and hospital according to the provisions of the Medical Service Certificate.

*Service No. 3* indicates that the subscriber is enrolled in the Surgical Benefit Plan and is entitled to sugical, x-ray and maternity services according to the provisions of the Surgical Benefit Certificate, performed when the subscriber is a bed patient in a hospital.

(Service No. 1 alone indicates that the patient is a subscriber to the HOSPITAL service plan of Michigan Hospital Service. Most subscribers will have a combination of services No. 1 and 2 or 1 and 3).

If there is any doubt in the doctor's mind as to whether or not the services required are benefits under Michigan Medical Service, the Initial Service Report setting forth the services to be rendered will bring a prompt notice from Michigan Medical Service whenever services requested are not properly benefits under the subscriber's certificate.

## Render Bills Every Month

3. *Monthly Service Bill.*—At the completion of services, but not later than the end of each month, the doctor sends a Monthly Service Report to the attention of the Medical Advisory Board itemizing the services rendered, which are to be paid by Michigan Medical Service.

To avoid delay in the approval of this bill for services, all information requested should be filled in as completely as possible. The Medical Advisory Board will be assisted greatly if the doctor sending the report will indicate the amount of special services he has rendered such as the extent of lacerations sutured; the location, size and type of tumor or cyst removed; the particular type of operation performed (Sturmdorf, Baldy-Webster, Caldwell-Luc, etc.). Each service is paid for separately; hence, it is important to specify all services rendered.

A revised Monthly Service Report embodying many improvements gained by actual experience is now ready for use and will make reporting even more simple for the doctor.

One of the chief problems in the first several months of operation of Michigan Medical Service has been the failure on the part of doctors to send *Monthly* Service Reports promptly (once per month) or to send completed reports. Such late or incomplete reports make it impossible to pay doctors promptly. It will be to the advantage of all concerned—the patient, the doctor, and the medical service plan—if the doctor and his office assistant will give close attention to rendering prompt and complete bills to Michigan Medical Service for services rendered.

After the completed Monthly Service Report is sent to Michigan Medical Service, the doctor should make certain that a bill is not also sent by his office to the patient. The sending of a bill to the patient causes confusion. If the patient is a subscriber to Michigan Medical Service with an income below the limit of $2,000 for the Individual Certificate or $2,500 for the Husband and Wife or Family Certificate, no bill should be sent by the doctor to the patient for services which are to be paid in full by Michigan Medical Service. However, in the event the patient is a subscriber whose income is above the limit, the statement which is returned with the check by Michigan Medical Service will indicate that the payment is to apply as a credit. The doctor may then send a bill to the patient for the difference, if any, between the payment received from Michigan Medical Service and the charge which we would customarily make to the patient.

### Payments Determined by Doctors

Attention is invited to the important fact that the payments to be authorized for services are determined by the doctors themselves. Any inequity in the payments made can be rectified by presentation of the matter to the Medical Advisory Board. No outside party or insurance company is arbitrarily deciding the payments that should be made for services rendered.

Payments to doctors are made in accordance with each service rendered. Therefore, it is of considerable importance for the doctor to specify in his Monthly Service Report each service rendered in order that the Medical Advisory Board can authorize payment. For example, if in the course of the office treatment the doctor orders blood examinations, a basal metabolism test, or similar services, all such services should be itemized in order that the appropriate payment for each can be made.

A Schedule of Benefits, which has been prepared with the coöperation of numerous committees representing the Michigan State Medical Society and the various specialty groups, is used by the Medical Advisory Boards as a guide in the determination of the payment to be authorized.

The items in the Schedule are equivalent to the prevailing charges by doctors of medicine in Michigan for services to subscribers in the income group below $2,000 per year for an individual and $2,500 per year for a family. Payments for all Monthly Service Reports are authorized in accordance with the level of benefits indicated in the Schedule. In cases where extensive services or prolonged aftercare is required, extra payments in addition to the Schedule of Benefits are authorized.

### Prompt Payments Up to You

Payments can be made promptly only for Monthly Service Reports which are received on time. Incomplete or late reports must wait until the next meeting of the Medical Advisory Board and accordingly payment is delayed.

*Avoid delay in payment for your services by sending a completed Monthly Service Report on time.*

To permit even more prompt payment to doctors, the Board of Directors has authorized payments to doctors on a weekly, instead of a monthly, basis. This payment arrangement, which will be put into operation as soon as possible, means that payments can be made as soon as completed reports are received and approved. Hence, doctors should send in their Monthly Service Reports immediately after services are completed.

# YOU AND YOUR BUSINESS

## INTANGIBLES TAX AND ACCOUNTS RECEIVABLE

A physician writes: "Many accounts receivable are probably uncollectible, but this fact is not definitely known at the time of the tax return. Is the Intangibles Tax payable on these accounts?"

The answer, according to the State Tax Commission, is "yes." The Commission, charged with the administration of the 1939 Intangibles Tax Law, has ruled that "until there has been an actual bona fide charge-off or treatment of the account or note by the taxpayer as *worthless,* it should be shown in the return and the tax computed thereon on the full face amount of the account, regardless of the fact that its collection may be known to be questionable. In other words, notes and accounts receivable, for the purposes of this tax, are either wholly good or wholly bad so as to be in effect non-existent."

Another question was asked "Is the tax payable year after year on the same account?"

The answer again is "yes." The State Tax Commission holds that as long as an account is carried on the books as a receivable, it is considered an asset and is held subject to the Intangibles tax!

"If accounts receivable are not collected, how long must they remain on the books before they are legally uncollectible?" is another query asked.

The Statute of Limitations in Michigan outlaws all open accounts and notes after they have been inactive for a period of six years. In other words, an account upon which no charge or payment has been made for six years is considered uncollectible by the laws of the State of Michigan. All accounts in this category naturally should not be included when reporting Intangibles Tax.

The State Tax Commission has established the date of *September 30, 1940,* as the date for obtaining the average value of bank deposits, notes receivable, accounts receivable and other similar credits whether or not secured, and notes and accounts payable, the value of which changes during the year, which date may be used in determining the Intangibles Tax with respect to the accounts directly connected with the conduct of a particular business or professional practice. All other holdings must be averaged for the entire year.

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**County Secretaries Conference**
**Lansing, Sunday, January 19**

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## THE RIGHT AND WRONG WAY

When the Legislature passes a law relating to the practice of medicine, you as a physician know pretty well what the effect of that law will be. But experience has shown that members of the Legislature do not always know how and why their legislative acts will affect the practice of medicine unless physicians write and tell them, according to the Medical Society of the State of New York.

Your views are always welcome, for the men who stay in the Legislature the longest are those who read and heed their constituents' letters. But there's a right way to write effectively to your legislators. May we offer these suggestions:

*Do*—spell your legislator's name correctly; make sure whether he is a Senator or a Representative; state concisely what you think and why—the briefer the better; cite specific illustrations, whenever possible, as to effects proposed legislation would have on the practice of medicine and people in your community; write on your office stationery; sign your name plainly. Type it under the signature; send a letter rather than a telegram when time permits; seize every opportunity to become personally acquainted with your legislators.

*Don't*—threaten political reprisals; don't write in a captious or belligerent mood; don't remind your legislators of broken promises; don't attempt to speak for anybody but yourself; don't insert newspaper clippings or mimeograph material; don't send a chain letter or post card; don't quote from form letters; don't write only when you want a favor. Letters of commendation are always welcome; don't try to make an errand boy out of your legislator; don't become a chronic letter writer.

## HONORARY AND ASSOCIATE MEMBERSHIPS FOR LAYMEN

At its 1940 session, the M.S.M.S. House of Delegates amended the Constitution of the Michigan State Medical Society so that county medical societies may confer Honorary or Associate Memberships on laymen. The section relating to Honorary Membership states that "county societies may elect any persons distinguished for their services or attainments in Medicine or the allied sciences, *or other services of unusual value to organized medicine or the medical profession.*"

County Societies may elect as Associate Members:

"1. Persons not members of the profession but engaged in scientific or professional pursuits whose principles and ethics are consonant with those of this Society.

"2. Internes serving their first year in any approved hospital, internes of longer standing, resident physicians in training, and teaching fellows not engaged in private practice, but not after five years from the receipt of first medical degree (M.D. or M.B.).

"3. Commissioned medical officers of the United States Army, Navy, Public Health Service and Veterans' Administration on duty in this state who are not engaged in private practice of medicine.

"4. Physicians not engaging in any phase of medical practice."

Upon recommendation of a county society, the M.S.M.S. House of Delegates may elect such persons as Honorary or as Associate Members of the State Society, according to Article Three, Sections 4 and 5 of the M.S.M.S. Constitution.

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**County Secretaries Conference**
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## LIABILITY OF A CITY-EMPLOYED PHYSICIAN

It is well settled that a municipality is not liable for the negligence of an employee engaged in the care of the poor (Summers vs. Daviess County, 103 Indiana, 262, 2 N.E. 725),

Conversely, therefore, the fact that a physician may be employed by a city does not excuse him from liability for injuries occasioned by his own negligence. In the absence of a statute to the contrary, a municipality may not be held liable for injuries received by a welfare patient due to the negligence of a physician employed by the municipality. Ordinarily, the liability of the agent is the liability of the principal; but a principal may escape liability in certain instances, even though the agent remains liable, as where the principal is acting purely in the performance of a public duty.

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**County Secretaries Conference**
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## PRIVILEGED COMMUNICATIONS

"It is well recognized that medical records as well as roentgenograms carry with them the status of privileged communications unless the patient expressly waives his rights in that respect, or they have been negatived by law for purposes of public policy. This, of course, implies that notwithstanding that those possessing such property hold the legal title thereto, they are viewed as constructive trustees for the patient in that they are precluded from using such property unconditionally for purposes which may possibly run counter to the patient's beneficial equitable interests therein—without his consent, or operation of the law."

—Carl Scheffel, *Medical Jurisprudence.*

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**County Secretaries Conference**
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## "EVERY ELIGIBLE PHYSICIAN"

Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, the moral and material conditions of every physician in the county; systematic effort shall be made by each member and by the county society as a whole to increase the membership until it embraces every eligible physician in the county. (From M.S.M.S. By-laws, Chapter 9, Section 7).

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## LAWS AFFECTING DOCTORS

"Every law that is proposed, certainly every law that is passed, and every law which may adversely affect him, whether or not it appears to be directly connected with his professional activities, ought to be viewed with keen interest by every physician, and dealt with in an appropriate manner," according to Carl Scheffel in his *Medical Jurisprudence,* a worth-while work of medical-legal questions.

## KEEPING COMPLETE WRITTEN RECORDS

Leo M. Ford, J.D.

It is highly important that maximum care be exerted in the keeping of complete and accurate records. This is true from both the legal and medical point of view. A record is a summary or abstract of the professional relationship from the time the patient first came under the doctor's care until he was discharged.

**The making of the record and the examination of it from time to time while the patient is under the doctor's care, enables him to give more careful attention to the important symptoms, the reaction to treatment, and undoubtedly leads to more accurate diagnosis and treatment than is true when one relies on an overtaxed memory.**

From the legal point of view, a written record establishes the dates of services, the diagnosis, and the treatment. It is not possible to foresee when this record may become important. One case is as of much moment as another in this regard, and carelessness or indifference in keeping a written record only makes it easy for a disgruntled patient to establish malpractice to the satisfaction of a jury, when in fact the treatment was proper.

For example, a case was recently filed against a doctor who had no records. He reported that he had never seen or treated the patient. He was so positive that his memory was correct that on conditional examination before trial, he testified that he had never treated the patient. The patient, however, was able to establish by witnesses who accompanied him to the office, that he had been under the doctor's care and had received treatment for the condition of which he now complained. The doctor's inability to recall the patient, and his testimony that he never treated him, made the defense practically hopeless.

It is, therefore, apparent for the doctor's own protection that accurate records be maintained. A considerable duration of time, even years, may elapse before they become of consequence.

**In making a record of this character, which shall be admissible as evidence should litigation develop, it is necessary that the entries be made contemporaneously with the facts to which the entries relate. But the term contemporaneous is not to be construed to mean that the record must be made at the very moment of the occurrence, although it should be made as soon thereafter as would reasonably make it a part of the transaction.**

In one case, the hospital record was offered in evidence to show that the plaintiff, suing for injuries sustained in an automobile accident, behaved in an unruly manner at the hospital while under treatment and disobeyed the orders of the doctor and the nurses as to keeping quiet and refraining from movement which would likely interfere with the proper adjustment and healing of the fractured bones. From the evidence, it was established that it was the rule of the hospital that a record should be kept, showing among other things, the condition of the patient when received, his treatment while in the institution, his condition from time to time, denoting the progress toward recovery or otherwise as the case might be, and of such other matters as might have a bearing upon the case. This record was made up every three days, and the method was the one employed at the hospital. It was claimed by the plaintiff that the records were not made contemporaneously and that they should have been excluded, but the court took the opposite view of the matter and held that taking into consideration the regular method in which these records were made, and the apparent impracticability in a hospital of recording each event as it occurred, the facts relating to the patient were recorded within such reasonable time as would make them a part of the transaction; therefore, held them to be contemporaneous.

The court further held that the fact that the recording officer made the entries embracing some matters which did not come under his own personal knowledge, but were communicated to him through doctors and nurses connected with the institution, did not affect the admissability of the records. It has, however, been held in many cases that such records, unless supported by the testimony of the one who made them, if that person is alive and capable of being produced to testify, are not admissable.

### Has the Patient a Right to His Case Record?

An interesting decision was recently handed down on the question as to whether the patient has a right to his case record. The patient had been admitted to a private sanatorium for treatment for an intoxication caused by a hypnotic. The treatment had been successful, but the patient desired to file suit against the manufac-

turer of the drug used. To strengthen his allegation in the declaration, he wished to make use of the clinical history of his illness and requested the attending physician to furnish him this record. The doctor and the sanatorium denied his request, and the patient brought legal action against both, demanding the delivery of the record. The defense contended that the history of the patient is in the nature of the attending physician's private notations, intended solely for his private use, and that such record should never be accessible to a patient, and if the patient desired to sue the pharmaceutical company, he could have the members of the sanatorium staff subpoenaed to be witnesses. The medical experts who testified in this case were of the opinion that case records were to be regarded as a physician's personal property and that under no circumstances should a patient be permitted access to them, and, further, that a universally recognized principle of professional ethics forbids the physician to furnish the patient full information on the latter's physical condition if such information might upset the patient's mental equilibrium. It must therefore remain within the discretion of the physician whether he wishes to supply a patient with his case history.

On the basis of the expert opinion, the Supreme Court dismissed the case.

**The court specifically stated that a patient has no right to demand access to the record of his case if the physician considers the divulgence of the data therein contained contra-indicated. There exists, accordingly, no legal avenue by which the plaintiff may become acquainted with the etiology and the clinical course of his malady.**

Should suit be filed against the pharmaceutical manufacturer, the court itself may impound medical records for its own guidance, but the relinquishment of the medical records cannot be legally claimed by private persons.

### Privileged Communications

At common law, a physician was obliged to disclose information acquired in his professional capacity, if called upon by the court to do so. There are now, in a great many jurisdictions, statutes protecting the individual from such disclosures. This brings us to the question of whether or not hospital records are privileged communications in those states where privileged statutes exist. The question as to the admissability of hospital records was before the court for adjudication in a suit for damages against a municipality for personal injuries occasioned by a defective sewer hole. The plaintiff, a woman, claimed that the amputation of one of her legs was the direct consequence of the accident. It was admitted that four or five years before this, she had fallen while skating and had trouble with the leg which was amputated after the accident at the sewer hole, and the records of the hospital at which she was treated, both before and after the accident, were offered as evidence at the trial.

**The doctor in charge of the records identified the record as being the official record of the hospital and offered it in evidence. The offer of this evidence was excluded because the entries made were privileged communications, first having been made for the attending physician in order that he might correctly diagnose the patient's case and administer proper treatment. The Supreme Court held this ruling correct, as hospital physicians who treat patients at a hospital cannot testify as to what they learned while attending there. The plaintiff contended that these records were not privileged, since they were copies of the official record, but the court held that it still remained privileged. The court further held that the mere fact that the ordinance of the city in question required such a record kept, was no reason why the statute regarding privileged communications should be violated. The privilege statute, of course, obtains to individual physician's records just the same as to hospital records.**

### Conclusion

To urge the keeping of accurate written records is an old story, yet the protection afforded by a detailed office record is often lost sight of by the busy doctor. Time given to this detail is far better than time given to defending a law suit and disclosing to the public a careless and indifferent practice. You need not make this burdensome, but be meticulous in jotting down each date with a note as to the nature of the services rendered, sufficient to refresh your memory at some later date, should it become necessary. This will enable the doctor to make a more careful study of the case and arrive at a

proper diagnosis and treatment, and furthermore, give the doctor real protection should litigation develop.

## 1941 CONVENTION IN GRAND RAPIDS

The Council, upon authority granted by the House of Delegates, has chosen Grand Rapids for the 1941 annual meeting of the Michigan State Medical Society. The dates: Wednesday, Thursday and Friday, September 17, 18, 19. The House of Delegates will meet Tuesday, September 16, 1941. The headquarters hotel will be the Pantlind; the general assemblies, five section meetings and the scientific and technical exhibits will be housed in the Civic Auditorium.

**County Secretaries Conference**
**Lansing, Sunday, January 19**

## USE THE TITLE "M.D."

The title "Doctor" is used, legally and otherwise, by so many people in so many callings that it is no longer descriptive of a Doctor of Medicine. Only by using "M.D." after his name on his stationery, his prescription pads, and his sign, can a Doctor of Medicine protect himself and his patients from misrepresentation, inspired or accidental.

It is further urged that Doctors of Medicine who know of violations of the law regarding the use of the unqualified title "Doctor" should notify the State Department of Health—State Board of Registration in Medicine of such irregularities.

## THIRD ANNUAL FORUM ON ALLERGY

In response to an apparent demand, the Annual Forum on Allergy was founded three years ago by a group of outstanding allergists in the middle west to afford a forum in which to review the progress of Clinical Allergy. Annual meetings have been held in Toledo, Ohio, and Chicago, Illinois. This year the meeting will be held at the Claypool Hotel in Indianapolis on Saturday and Sunday, January 11 and 12, 1941. This offers to the internist, the pediatrician, the dermatologist, the otolaryngologists, and all other physicians an opportunity to bring themselves up to date in this field of medicine over a single week-end. All physicians in good standing in their local medical society are most welcome. There will be a small registration fee of five dollars.

### Program

**SATURDAY, JANUARY 11, 1941**

9:00-11:00 a.m.

Registration at the Forum Headquarters Suite. This offers two hours of informal discussion.

11:00-12:30 p.m.

STUDY GROUPS—Series A. Note attendance requires pre-Forum registrations. Registrations should be mailed to Dr. Tell Nelson, 636 Church Street, Evanston, Illinois.

| Topics | Instructors |
|---|---|
| 1. Atopic Eczema | Dr. Karl Figley, Toledo, Ohio |
| 2. Urticaria | Dr. Ethan Allen Brown, Boston |
| 3. Symptomatic Treatment in the Case of Bronchial Asthma in Which Cause Cannot Be Determined | Dr. Milton Cohen, Cleveland |
| 4. Mold Allergy | Dr. S. M. Feinberg, Chicago |
| 5. Allergic Coryza | Dr. French Hansel, St. Louis |

12:30—Subscription Luncheon

2:00-3:00 p.m.

STUDY GROUPS—Series B

| | |
|---|---|
| 1. Atopic Eczema | Dr. Rudolph Hecht, Chicago |
| 2. Urticaria | Dr. Jonathan Forman, Columbus |
| 3. Symptomatic Treatment in the Case of Bronchial Asthma in Which the Cause Cannot Be Determined | Dr. John Sheldon, Ann Arbor |
| 4. Mold Allergy | Dr. M. B. Morrow, Austin, Texas<br>Dr. Homer Prince, Houston, Texas |
| 5. The Heart in Asthma | Dr. Oscar Swineford, University, Va. |

4:00 p.m.

SPECIAL LECTURE: Dr. George Waldbott, Detroit, Presiding

Allergic Manifestations in the Eye
Dr. Albert D. Ruedemann, Cleveland Clinic

7:00 p.m.

Annual Smoker with Informal Discussion and Demonstrations

| Exhibits | Demonstrators |
|---|---|
| (a) Ocular Allergy | Dr. A. D. Rudemann, Cleveland<br>Dr. J. W. Thomas, Cleveland |
| (b) Mold Allergy | Association for Mycological Investigation<br>Dr. Marie Morrow, Austin, Texas<br>Dr. Homer Prince, Houston, Texas |
| (c) "Spontaneous Allergy (Atopy) in Lower Animals" (Motion Picture) | Dr. Fred Wittich, Minneapolis |

**SUNDAY, JANUARY 12, 1941**

9:00-10:00 a.m.

SYMPOSIA ON CLINICAL SUBJECTS

Symposium on Bronchial Asthma

Moderator: Dr. B. Z. Rappaport, Chicago

The Importance of the Diaphragm in Bronchial Asthma
Dr. John Mitchell, Columbus, Ohio
The Use of Breathing Exercises in the Treatment of Bronchial Asthma — Dr. I. M. Hinnant, Cleveland, Ohio
The Importance of Rest in the Treatment of Bronchial Asthma
Dr. Barney Credille, Flint, Michigan
The Importance of Nutrition in Bronchial Asthma
Dr. Howard Lee, Oshkosh, Wisconsin
QUESTION AND ANSWER PERIOD

10:00-11:00 a.m.

Symposium on Insects as Allergens

Moderator: Dr. Harry Huber, Chicago

Beetles — Dr. Harvey Johnston, Ann Arbor, Michigan
Fish Food — Dr. Karl Way, Akron, Ohio
Moths — Dr. Ralph Mills, Decatur, Illinois
Grain Mites — Dr. Fred Wittich, Minneapolis
QUESTION AND ANSWER PERIOD

11:00-12:00 noon

Symposium on Allergic Headache

Moderator: Dr. Theodore Squire, Milwaukee

Differential Diagnosis — Dr. S. R. Zoss, Youngstown, Ohio
Value of Diagnostic Procedures
Dr. Myron Weitz, Cleveland, Ohio
Non-Specific Therapy — Dr. E. G. Tatge, Evanston, Illinois
Specific Therapy — Dr. Orville Withers, Kansas City, Missouri
QUESTION AND ANSWER PERIOD

12:30 p.m.

ANNUAL FORUM DINNER

Dr. C. B. Bohner, Indianapolis, Presiding

The Presentation of Gold Medal for Distinguished and Outstanding Contributions in the Field of Allergy.

2:00 p.m.

THE ANNUAL FORUM LECTURE

Dr. Béla Schick, New York
Allergy, Hypersensitiveness and Immunity

SPECIAL LECTURE

Water and Electrolyte Metabolism in Allergy
Dr. M. M. Cook, St. Louis

# Woman's Auxiliary

## PRESIDENT'S MESSAGE

IT is with the feeling of deepest humility that I write this, the President's Message. I appreciate to the fullest degree the confidence which you have shown in electing me, and hope that I may be successful enough in this office to make you feel that your confidence has not been misplaced. However, I can do nothing, without the help of all of you. So let's all put our shoulders to the wheel, and make this an outstanding year for the Woman's Auxiliary to the Michigan State Medical Society!

There are several things which we hope to accomplish this year. In the first place, I hope that Michigan will do what our national president, Mrs. V. E. Holcombe, asked, and support the *Bulletin*. When Mrs. Holcombe was in Detroit for the meeting of the Woman's Auxiliary to the Michigan State Medical Society in September, she stressed the fact that she was anxious to have as many Auxiliary members as possible take the *Bulletin*. This is the official magazine of the Woman's Auxiliary to the American Medical Association, and as such should be supported. An understanding of the affairs of the National Auxiliary will add greatly to one's interest in the County and State Auxiliaries, and will make all members realize to what a far-reaching organization they belong.

This year, with so much of the world at war, it seems to me particularly fitting that we, as doctors' wives, should do our utmost to alleviate suffering. There is Red Cross work to be done everywhere, and if some of the County Auxiliaries are too small to organize a unit for making bandages, let me urge you to at least offer to knit or sew. Let's make other women's organizations realize that the medical auxiliaries are groups upon which they can always count when there is an emergency.

There are many other things which we hope to accomplish this year, too. We hope to organize more county auxiliaries, so that doctors' wives may be banded together in all parts of the state.

As to Public Relations, the task of seeing that correct medical information is presented to the public is most important. If every County Auxiliary will do its utmost to have something constructive along this line to report, Michigan will have a much better place in the Public Relations' report than it did at the meeting of the Woman's Auxiliary to the American Medical Association held in New York last June.

Of course, *Hygeia* will have as important a place in our program as ever. Perhaps with the help of all of you, we will be able to increase our subscriptions materially.

And now, having mentioned a few of the things which are uppermost in my mind, let me introduce you to the new officers and committee chairmen. We are all ready to serve each and every one of you in any way which we can, so please write us if there is anything which we can do to help you. The list follows:

### Officers

President-Elect.....Mrs. William J. Butler, 327 Briarwood Ave., Grand Rapids
Vice President.....Mrs. O. D. Stryker, Fremont
Secretary.....Mrs. Audrey O. Brown, 19575 Renfrew Road, Detroit
Treasurer.....Mrs. H. L. French, 1620 W. Main St., Lansing
Past President.....Mrs. L. G. Christian, 400 Everett St., Lansing
Honorary President.....Mrs. Guy L. Kiefer, 148 E. Grand River Ave., Lansing

### Committee Chairmen

Archives.....Mrs. Paul R. Urmston, 1862 McKinley Ave., Bay City
Bulletin Circulation Manager.....Mrs. Palmer Sutton, 25575 York, Royal Oak
Exhibits.....Mrs. Galen B. Ohmart, 374 Lodge Drive Detroit
Finance.....Mrs. Elmer L. Whitney, 18224 Wildemere Ave., Detroit
Historian.....Mrs. J. Earl McIntyre, 600 S. Grand Ave., Lansing
Hygeia.....Mrs. A. V. Wenger, 132 Grand Ave., Grand Rapids
Legislation.....Mrs. L. G. Christian, 400 Everett St., Lansing
Organization.....Mrs. John J. Walch, 709 Fifth Ave. S., Escanaba
Parliamentarian.....Mrs. Ledru O. Geib, 1411 Berkshire Rd., Brosse Pointe
Press.....Mrs. R. H. Alter, 801 S. West Ave., Jackson
Program.....Mrs. Lloyd C. Harvie, 417 Ardussi Rd., Saginaw
Public Relations.....Mrs. G. L. Willoughby, 5013 N. Saginaw St., Flint
Revisions.....Mrs. O. D. Stryker, Fremont

Don't forget that I'm counting on *all* of you to help make this a successful year for the Woman's Auxiliary to the Michigan State Medical Society!

(Mrs. Roger V.) Helen R. Walker, *President*
Woman's Auxiliary, Michigan State Medical Society.

**Bay County**

The Woman's Auxiliary to the Bay County Medical Society held its first fall meeting on November 13 at the Elks Club, with twenty-two members present for dinner.

Mrs. W. R. Ballard, president, presided and gave her report as delegate to the state convention held in Detroit.

A letter was read stating that the Auxiliary has been accepted as a member of the Bay County Council of Social Agencies. Mrs. Ballard will attend a meeting of this Council November 28.

The Auxiliary is urging that subscriptions be taken to the *Medical Auxiliary Bulletin*. Mrs. F. T. Andrews read a report from the American Medical Association.

The members were asked to assist the local Red Cross by helping make surgical dressings.

Mrs. R. E. Scrafford, Chairman of rummage sale, asked that everyone who is willing give two dollars to our treasurer to take the place of the rummage sale that had been scheduled for this fall.

The group decided to have the public meeting in January this year instead of February.

Mrs. Ballard appointed Mrs. F. T. Andrews, Mrs. R. C. Perkins and Mrs. P. R. Urmston on the membership committee.

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**Calhoun County**

The Calhoun County Medical Auxiliary held its second meeting of the year at the home of Mrs. M. R. Kinde on the evening of November 12.

There were thirty members present and one guest, Miss Katherine Sleath of London, England.

A donation of $100.00 was given to the Crippled Children's Committee.

It was suggested that the Auxiliary again supply an adequate Christmas for a needy family. This motion was approved, and Mrs. Kenneth Lowe appointed a committee chairman to take charge of the work.

Following the business session the ladies again sewed for the Red Cross.

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**Jackson County**

The regular monthly meeting of the Jackson County Medical Auxiliary was held at the Jackson Country Club, Nov. 19, 1940, and was a combined meeting with the Dental Auxiliary.

After dinner, the meeting was opened by the president, Mrs. G. R. Bullen who introduced Mrs. W. A. Wickham, chairman of the project committee. Mrs. Wickham outlined for us the new project this year, which is to be a personal project to help children whose normal life is handicapped through lack of glasses, crutches, etc. The committee is also having a Christmas wrapping party to wrap toys at the home of Mrs. McGarvey.

The president then introduced Mrs. Harold Greene, president of the Dental Auxiliary, who thanked the Medical Auxiliary for the enjoyable meetings they have had with us, and expressed the hope they would continue.

Mrs. Chalmers Johnson then introduced Mrs. Luther Pahl, violinist and Mrs. Don Lyons, who accompanied her. They gave us several lovely numbers and the meeting was turned over to Mrs. Morris Wertenberger, the program chairman.

A play entitled "Everybody's Doing It" was given by a group from the Medical Auxiliary and was thoroughly enjoyed by everyone.

Last but not least was our good friend Mrs. Camburn with her movies of Nova Scotia which she took this summer. They were beautiful and her interesting account of the trip completed a perfect evening.

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**Kalamazoo County**

The November meeting of the Auxiliary to the Kalamazoo Academy of Medicine met at the home of Mrs. Homer Stryker. Thirty members enjoyed a coöperative dinner. Mrs. Kenneth Crawford, president, conducted the business meeting at which time plans and activities for the year were discussed. The various chairmen were called upon to give reports. The remainder of the evening was spent informally.

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**Kent County**

The November meeting of the Woman's Auxiliary to the Kent County Medical Society was held in the Auditorium of the new Public Museum, where the members of Mrs. M. W. Shellman's Philanthropic Committee served luncheon.

Mrs. Guy DeBoer presided at the business meeting which was followed by Mrs. Clifford B. Wightman's vivid review of "Trelawny" by Margaret Armstrong.

We are looking forward to the December meeting when Dr. V. M. Moore will talk to us on "State Controlled Medicine."

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**Van Buren County**

Ten members of the Van Buren Auxiliary enjoyed a delicious turkey dinner with the doctors of the Van Buren County Medical society at the Village Hall of Decatur on Tuesday evening, November 12.

Rules of the essay contest which the Auxiliary is sponsoring were discussed and agreed upon as follows:

General Subject—"Suggestions for improving the health of young people in Van Buren County." (Or any topic found in *Hygeia* magazine.) Prizes—First prize to be $5.00. Five honorable mentions of $1.00 each. English teachers in each town of the county are asked to submit two essays from their 10th, 11th, and 12th grade classes. Essays are to be numbered only. The name of the student and his town to be enclosed in an envelope with corresponding number.

Deadline—Essays are to be sent to Mrs. Terwilliger of South Haven by January 31. Letters announcing the *Hygeia* essay contest were sent to English teachers of the county immediately after this meeting.

The contest has a twofold purpose: first, to popularize *Hygeia* magazine with high school pupils, and second, to make libraries and parents *Hygeia*-minded.

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**Wayne County**

The Woman's Auxiliary to the Wayne County Medical Society held its regular monthly meeting at the Society's headquarters on Friday, November 8, 1940.

Following the business session, the members were addressed by Mr. J. D. Laux, Executive Director of Michigan Medical Service. Mr. Laux discussed the objectives of the organization and reported on the progress made during the first year of its existence.

Mr. Laux stated that a definite trend toward the socialization of medicine is evidenced by the various medical surveys which have been made, and by the numerous efforts at legislation. Since the movement toward the socialization of medicine will undoubtedly continue, the medical profession must take a very energetic part in the supervision and direction of activities which deal with medical practice. The possibility of increasing incomes so that families with limited means could meet the costs of a good standard of living, including adequate medical care seems remote. Therefore most efforts at a remedy have centered around a group pre-payment arrangement for the purchase of medical care.

In conclusion, Mr. Laux emphasized the advisability of the members of the Woman's Auxiliary taking an active interest in furthering the education of the public in matters relative to payment for medical service. Each member should become thoroughly familiar with Michigan Medical Service, as this is the program of vital importance to doctors and to the public in Michigan.

Following Mr. Laux's address, tea was served by the Social Committee in honor of twenty new members. Mrs. Howard P. Doub,, Mrs. Richard C. Connelly, Mrs. Ira G. Downer, and Mrs. Frank A. Weiser were hostesses.

# MICHIGAN'S DEPARTMENT OF HEALTH

HENRY A. MOYER, M.D., Commissioner, Lansing, Michigan

### 1940 STATE'S SAFEST YEAR FOR BABIES?

There is an excellent chance that a new low record in infant deaths will be established for 1940. For the first nine months there were 40.64 deaths of babies under one year for each 1,000 births. The rate for the same period in 1939 was 41.96 deaths per 1,000 births.

If the favorable trend continues, it is likely that the rate for the year will be below the 41.8 mark of 1939, which established a record.

In pointing out the possibility of making 1940 the safest year for new babies that the state has known, Dr. Lillian R. Smith, director of the Bureau of Maternal and Child Health, urged each prospective mother who has not already done so to place herself immediately under the care of a physician. She cautioned adults to keep their own colds and those of children away from babies, and said that every new baby and every infant under a year should have the care of a family doctor.

### MEASLES INCREASE

Michigan will have a bigger measles epidemic this winter than the 1935 and 1938 outbreaks, if a sharp rise in cases this year is an indication.

"The rise in cases is early, and the number is much larger than reported prior to the last two epidemic years," said Dr. H. Allen Moyer, commissioner. "It would not be surprising to see the total of cases go higher than 80,000 which was the total in each of the previous two epidemics. The cases reported so far this year are 16,000 as compared with 6,500 in 1934 and 6,000 in 1937."

Dr. Moyer has asked parents to isolate children who appear to be coming down with a cold, and suggests that especially in localities where measles is prevalent the family physician should be called. The symptoms of a common cold are identical with those of measles the first day or two. While measles is communicable before the fever, running nose and cough symptoms appear, isolation will help protect babies and young children, for whom measles may be dangerous. Most measles deaths occur in children under five years of age.

September, October and November reports of measles in certain counties have been as follows: Calhoun 16, 61, 286; Kalamazoo 3, 69, 166; Montcalm 9, 59 and 89; Washtenaw 5, 25, 31. Detroit cases were 96 in September, 334 in October and for the first three weeks of November, 590. Kent county and Grand Rapids reported less than a dozen cases in November. The total for the month is approximately 1,600 cases.

### DECLINE OF CONTAGION

Only four out of 12 communicable diseases summarized by the Department of Health have been reported more times in the first ten months of this year than they were in 1939. The four are measles, which is on the way to a third-year epidemic, whooping cough, infantile paralysis and gonorrhea.

Ten-month reports showing increases follow with the 1940 total first and the 1939 total second; measles 14,851 and 9,631; whooping cough 8,986 and 7,905; poliomyelitis 1,140 and 881; gonorrhea 6,370 and 5,618. Reports showing declines were: lobar pneumonia 2,303 and 3,146; tuberculosis 5,083 and 5,315; typhoid fever 107 and 152; diphtheria 178 and 375; scarlet fever 8,923 and 10,465; smallpox 29 and 167; meningitis 35 and 48; syphilis 8,945 and 10,653.

### MORE BIRTHS

Provisional figures from the Bureau of Records and Statistics show that births have increased in the first nine months of the year, as compared with the January-September period in 1939. If the increase is maintained, the gain will be 3,500 for the year.

Births reported from January through September this year were 73,036, compared with 70,351 a year ago, a gain of 2,685. The rate per 1,000 population is 18.57 for 1940 and 18.02 for 1939 for these months.

Deaths were down slightly from last year in the first nine months. The figures were 38,791 for 1940 and 39,290 for 1939. The rates were 9.86 deaths per 1,000 population in 1940 and 10.07 for the first nine months in 1939.

### FIREARMS ACCIDENTS

In filling out death certificates for firearms fatalities, a number of physicians have added details which are of special interest. Among 12 firearms fatalities in October, one certificate carried the notation that the hunter (a boy of 18) was killed when he used his shotgun to club a wounded pheasant. A man of 35 was killed when cleaning his gun, a man of 39 died in an accidental discharge of his gun, and a man of 61 was killed when he climbed a fence with a gun. A child of two was killed at home, playing with a gun of some description.

### SHIAWASSEE SIXTY-THIRD

Shiawassee County will be the sixty-third county in the state to have a full time health department when its unit begins operation January 1. The Shiawassee County Medical Society had expressed its support for the health unit months ago, but approval of the board of supervisors and provision for finances were made only recently.

### SIXTY-SEVEN POLIO CASES IN NOVEMBER

Three days in the last week of November were the first since August 2 that no infantile paralysis cases were reported to the Department. The total for November was 67, which like the October total of 287 was a new record for the month. The previous November high was 45 cases in the former record year of 1931. The total cases of polio reported in 1931 was 1,137. The 11-month total for 1940 is 1,209.

# COUNTY AND PERSONAL ACTIVITIES

*The Wayne County Medical Society* "feather" party was a huge success. The largest crowd in the Society's history, 1,103, jammed the Masonic Temple for the annual pre-turkey festival on November 19.

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*Frank Power, M.D.,* M.S.M.S. Field Representative in Cancer, addressed a public meeting sponsored by the Woman's Auxiliary to the Bay County Medical Society, in Bay City on January 8.

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*Harold A. Miller, M.D.,* Lansing, represented the Michigan State Medical Society at the meeting of the Maternal and Child Health Advisory Committee of the Michigan Department of Health in Lansing on December 13.

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*Harold A. Miller, M.D.,* Lansing, Frank Van Schoick, M.D., Jackson, and Frederick B. Miner, M.D., Flint, represented the Michigan State Medical Society at the meeting of the Child Welfare Committee of the Michigan Welfare League in Lansing on December 16.

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**Acknowledgement**

The color plates facing page 840 in THE JOURNAL for November, 1940, are copyrighted by *The American Journal of Roentgenology and Radium Therapy,* and made available to THE JOURNAL through the courtesy of the American Roentgen Ray Society, Inc.

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*The 1941 Convention* of the Michigan State Medical Society will be held in Grand Rapids on September 16, 17, 18, 19, 1941, at the Hotel Pantlind-Civic Auditorium, the House of Delegates meeting on Tuesday, September 16. The 5th Annual Golf Tournament will be held at the Kent Country Club on Monday, September 15.

* * *

*The West Side Medical Society* of Detroit held its Eighth Annual Cancer Clinic at Eloise on December 4. The Clinic was conducted by S. E. Gould, M.D. Speakers included Drs. J. E. Croushore, E. R. Donoghue, C. A. Doty, T. K. Gruber, J. M. Grace, N. K. H'Amada, C. K. Hasley, A. Z. Howard, R. H. Lyons, H. J. Kullman, W. J. Seymour, W. L. Sherman and D. C. Somers.

* * *

*"The Surgical Treatment of Hypertension"* by Max M. Peet, M.D., Ward W. Woods, M.D. of Ann Arbor and Spencer Braden, M.D., of Cleveland, appeared in the *Journal of the American Medical Association,* issue of November 30, 1940. In the issue of December 7, 1940, the following articles appeared: "Acute Ascending Paralysis" by Russell N. DeJong, M.D., Ann Arbor; "Use of Cellophane Cylinders for Desiccating Blood Plasma" by F. W. Hartman, M.D., with the assistance of F. W. Hartman, Jr., Detroit.

* * *

*The Third Annual Congress* on Industrial Health, sponsored by The Council on Industrial Health of the A.M.A., is scheduled for the Palmer House, Chicago, January 13 and 14, 1941. The very full program includes discussions on many phases of industrial practice, including the Physician in Industry and National Defense by Irvin Abell, M.D., Louisville; a symposium on Hand Injuries, on Availability of Trained Industrial Health Personnel; on Acute Respiratory Disease in Industry; and on Industrial Ophthalmology. All physicians interested in industrial practice are invited. No registration fee. Write The Council on Industrial Health, American Medical Association, 535 North Dearborn Street, Chicago, for copy of the program.

*Robert B. Harkness, M.D.,* Hastings, former president of the Council of the Michigan Department of Health, has been appointed assistant field director of the W. K. Kellogg Foundation, a newly created position. Doctor Harkness is on leave for study and will begin his new work in May, working with M. R. Kinde, M.D., field director in the seven counties where the Foundation coöperates in health units. J. K. Altland, M.D., who resigned as director of the Grand Traverse County Health Department, succeeds Doctor Harkness in Barry County.

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*Pan American relationships* took another step forward in the field of medicine when the Pan American Congress of Ophthalmology was organized on a permanent basis at the meeting of the first congress in Cleveland, October 11-12, 1940, under the auspices of the American Academy of Ophthalmology and Otolaryngology. Harry S. Gradle, M.D., Chicago, was elected president of the congress. Conrad Berens, M.D., New York and Moacyr E. Alvaro, Sao Paulo, Brazil, who served with Doctor Gradle as members of the Committee that organized the initial meeting, were elected executive secretaries. Montevideo was tentatively selected as the place of the next meeting, to be held in 1943.

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*The National Grange* at its annual convention in Syracuse, N. Y., on November 19, 1940, reaffirmed its stand against federal or politically-controlled medicine. At the same time the National Grange leaders voiced their approval of voluntary group medical care plans, such as Michigan Medical Service which has been in operation in Michigan for the past nine months. Members of the Grange want to be certain they have the privilege of calling the physician of their choice rather than a doctor sent by some political bureau. Professionally controlled voluntary group medical care plans guarantee free choice of physician which is the inalienable right of the American people.

* * *

*The Battle Creek Medical Conference,* sponsored by the Calhoun County Medical Society and the Battle Creek Sanitarium, was held at the Sanitarium on December 3. The outstanding array of speakers on the program included J. Roscoe Miller, M.D., Chicago; Cleveland J. White, M.D., Chicago; David E. Markson, M.D., Chicago; M. A. Mortensen, M.D., Battle Creek; Michael L. Mason, M.D., Chicago; Harold J. Kullman, M.D., Detroit; James T. Case, M.D., Chicago; Arthur E. Mahle, M.D., Chicago; Harry Towsley, M.D., Ann Arbor; James K. Stack, M.D., Chicago; and Stephen W. Ranson, Jr., M.D., Chicago; B. A. Watson, M.D., Battle Creek; and C. W. Brainard, M.D., Battle Creek. The Conference ended in the evening with a banquet followed with a talk by Morris Fishbein, M.D., Editor of the *Journal of the American Medical Association.*

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*The Mississippi Valley Medical Society* offers annually a cash prize of $100, a gold medal, and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics) and practical value to the general practitioner of medicine. Contestants must be members of the American Medical Association who are residents of the United States. The winner will be invited to present his contribution before the next annual meeting of the Mississippi Valley Medical Society at Cedar Rapids, Iowa, October 1, 2, 3, 1941. Contributions shall not exceed 5,000 words, be typewritten in English in manuscript form, submitted in five copies and must be

An ever increasing flow of medical literature and clinical evidence continues to support the therapeutic effectiveness of Sulfathiazole in the treatment of Pneumococcal and Staphylococcal infections.

**SULFATHIAZOLE** (thiazole analogue of sulfapyridine) has been clinically demonstrated to be less toxic than either sulfanilamide or sulfapyridine. Moreover there are a number of observations which indicate that the sulfathiazole group definitely lessens the incidence and severity of vomiting. Other advantages are more uniform and rapid absorption, less conjugation after absorption, and greater effectiveness against the Staphylococcus.

**SULFATHIAZOLE,** "Ciba" (2-sulfanilyl-aminothiazole) is available in 0.5 gram tablets, in bottles of 50, 100, 500 and 1000. Also available are 5 gm. bottles of Sulfathiazole crystals for making reagent solutions for estimation of sulfathiazole content of the blood.

**CIBA PHARMACEUTICAL PRODUCTS, INC.**
SUMMIT NEW JERSEY

C · I · B · A

received not later than May 1, 1941. Further details may be secured from Harold Swanberg, M.D., 209 WCU Building, Quincy, Illinois.

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*The Radio Committee* of the M.S.M.S. advises that the following Health Talks were broadcast over radio station CKLW:

Saturday, November 16, 1940—1:15 p.m. "The Common Cold" by Arthur E. Hammond, M.D., Detroit.

Saturday, November 23, 1940—1:15 p.m. "Influenza" by Thomas Horan, M.D., Detroit.

Saturday, November 30, 1940—1:15 p.m. "Pneumonia" by Thomas G. McKean, M.D., Detroit.

Saturday, December 7, 1940—1:15 p.m. "Osteomyelitis" by Eugene A. Osius, M.D., Detroit.

Saturday, December 14, 1940—1:15 p.m. "The Value of X-ray Examinations in Accident and Emergency Cases" by E. R. Witwer, Detroit.

Saturday, December 21, 1940—1:15 p. m. "Colitis" by Harold Kullman, M.D., Detroit.

Saturday, December 28, 1940—1:15 p.m. "Wintertime Accidents" by Luther R. Leader, M.D., Detroit.

Saturday, January 4, 1941—1:15 p.m.—"Sinus Disease" by Wm. S. Gonne, M.D., Detroit.

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*The Joint Committee on Health Education* has available through the Extension Division of the University of Michigan the following educational health films: "Preventing Blindness and Saving Sight" (silent—2 reels); "Behind the Shadows" (Tuberculosis Association, sound—1 reel); "Foods and Nutrition" (sound—1 reel); "With These Weapons" (American Social Hygiene Ass'n—sound—1 reel); "Care of the Premature Child"; "Louis Pasteur" (sound—2 reels); "That Mothers Might Live" (sound—1 reel); "They Live Again" (sound—1 reel); "Tracking the Sleeping Death" (sound—1 reel); "Circulatory Control" (silent); "The Feet" (silent); "Heart Disease" (sound—March of Time); "Heredity" (sound); "Life of the Healthy Child" (silent); "Milk and Health" (sound—March of Time); "Moving X-Rays" (sound); "Nurses in the Making" (silent—2 reels); "The Alimentary Tract" (sound); "The Blood" (silent—¾ reel); and "Cancer, Its Cure and Prevention" (sound—March of Time).

During the year ending July 1, 1940, The Joint Committee on Health Education has sponsored 148 lectures on Cancer, Syphilis and Sex Education, Dental Hygiene, Mental Hygiene, Child Problems, Skin, Tuberculosis, Child Welfare, General Health, Crippled Children, Medical Care, Nursing and Maternal Hygiene. The Committee has sponsored twenty-four talks on similar subjects over twelve radio stations in Michigan. Health bulletins have been issued by the Committee on the subjects of "Problem Solving Approach in Health Teaching"; "Health Goals for the School Child" and "Experiences in Healthful Living as Developed by Teachers" and pamphlets on cancer. With the assistance of the Michigan Department of Health over 20,000 of these bulletins have been distributed.

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## COUNCIL AND COMMITTEE MEETINGS

1. Wednesday, December 18, 1940—4:00 p.m.—Child Welfare Committee, WCMS Bldg., Detroit.

2. Wednesday, December 19, 1940—6:00 p.m.—Executive Committee of The Council, Hotel Statler, Detroit.

3. Friday, January 10, 1941—6:30 p.m.—Finance Committee of The Council, Detroit.

4. Friday, January 10, 1941—6:30 p.m.—Publication Committee of The Council, Detroit.

5. Friday, January 10, 1941—6:30 p.m.—County Societies Committee of The Council, Detroit.

6. Saturday and Sunday, January 11 and 12, 1941—Midwinter Meeting of The Council, Detroit.

## DISTRICT MEETINGS

The *Second District meeting* will be held on Thursday, January 16, 1941, Hayes Hotel, Jackson, with Counsilor Philip A. Riley, M.D., presiding. President-elect Henry R. Carstens, M.D., Detroit, will speak on "Michigan Medical Service"; Secretary L. Fernald Foster, M.D., Bay City, will discuss "Organizational Activities"; and President P. R. Urmston, M.D., Bay City, will outline the latest developments in "Medical Preparedness." Other officers and councilors from neighboring districts will be guests of honor.

The *Eighth District* meeting will be held at Saginaw, January 23, 1941, with Councilor W. E. Barstow, M.D., St. Louis, presiding. President-elect Henry R. Carstens, M.D., Detroit, will discuss "Michigan Medical Service"; "Organizational Activities, Including Legislation" will be presented by Secretary L. Fernald Foster, M.D., Bay City; Executive Secretary Bill Burns will speak on "Medical Welfare"; and "Medical Preparedness" will be outlined by P. R. Urmston, M.D., president, Bay City.

The *Fifteenth District* meeting was held on Wednesday, January 8, 1941, at Rotunda Inn, Pine Lake, Councilor Otto O. Beck, M.D., Birmingham, presiding. President-elect Henry R. Carstens, M.D., Detroit, spoke on "Michigan Medical Service"; Secretary L. Fernald Foster, M.D., Bay City, outlined "Organizational Activities, Including Legislation and Medical Welfare"; and President P. R. Urmston, M.D., Bay City, spoke on "Medical Preparedness."

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## COUNTY MEDICAL SOCIETY MEETINGS

*Bay*—Wednesday, November 27—Wenonah Hotel, Bay City—Speaker: Clair Folsome, M.D.

*Ann Arbor*—Wednesday, December 18—Bay City Country Club—Annual Meeting.

*Calhoun*—Tuesday, December 3—Battle Creek Sanitarium—Annual Meeting. Speaker: Morris Fishbein, M.D., Chicago.

*Chippewa-Mackinac*—Friday, December 13—Annual Meeting.

*Dickinson-Iron*—Thursday, December 5—Annual Meeting.

*Genesee*—Wednesday, November 27—Flint—Annual Meeting.

*Gratiot-Isabella-Clare*—Thursday, December 19, Alma Annual Christmas Party.

*Hillsdale*—Thursday, November 28—Hillsdale—Speaker: John Sheldon, M.D., Ann Arbor.

*Ingham*—Tuesday, December 17, Lansing—Annual Meeting.

*Ionia-Montcalm*—Tuesday, December 10, Greenville—Speaker: Reed O. Dingman, M.D., D.D.S., Ann Arbor.

*Jackson*—Tuesday, November 19, Jackson—Speaker: Harther L. Keim, M.D., Detroit. Tuesday, December 17, Jackson—Annual Christmas Party.

*Kalamazoo*—Tuesday, December 17, Kalamazoo—Annual Meeting. Speaker: Hon. George E. Bushnell, Chief Justice, Michigan Supreme Court.

*Kent*—Tuesday, December 10, Grand Rapids—Annual Meeting.

*Lenawee*—Tuesday, November 19, Adrian—Speaker: John Barnwell, M.D., Ann Arbor.

*Muskegon*—Friday, December 13, Muskegon—Annual Meeting.

*Oakland*—Wednesday, December 4, Pine Lake—Annual Meeting.

*Ontonagon*—Wednesday, December 4, Ontonagon—Annual Meeting.

*St. Clair*—Tuesday, November 26, Port Huron—Speaker: Dr. Mitchell, Detroit. Tuesday, December 10, Port Huron—Speaker: Clifford D. Benson, Detroit. Tuesday, January 7, St. Clair Inn, St. Clair—Annual Meeting.

*Washtenaw*—Tuesday, December 10, Ann Arbor—Speaker: Charles F. McKhann, M.D., Ann Arbor.

Main Entrance

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*Wayne*—November 4—1st and 16th District Meeting. November 11—Medical Meeting. Speaker: Joseph T. Wearn, M.D., Cleveland. November 19—Feather Party. November 25—Symposium on Peptic Uulcer. December 2—"Medicine in the Defense Program" by Irvin Abell, M.D., Louisville, Ky. December 9—Speaker: Soma Weiss, M.D., Boston. December 16—General Practice Meeting—Speakers: Harry Miller, M.D., Wm. Carpenter, M.D., Wm. H. Good, M.D., and R. T. Crowley, M.D. January 6—Speaker: Howard T. Karsner, M.D., Cleveland.

* * *

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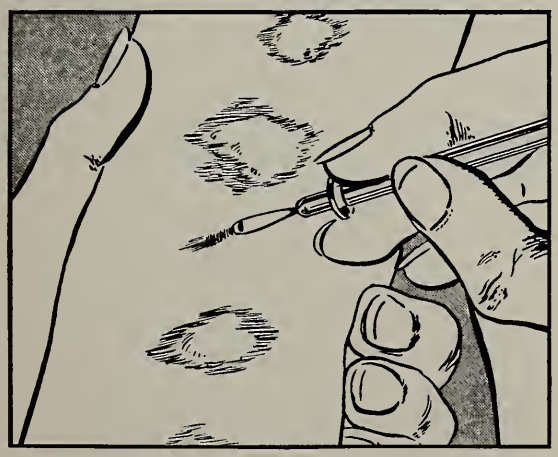

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# In Memoriam

**Herbert W. Hewitt** of Detroit, Michigan, was born October 13, 1875, in Milford, Michigan, and was graduated from the Detroit College of Medicine in 1903, after which time he served a two-year internship at Harper Hospital. This was followed by an assistantship to William F. Metcalf, M.D., for a period of six years. From 1904-1909 he was Demonstrator of Anatomy in the Detroit College of Medicine and Surgery. He took postgraduate work in pathology at the University of Michigan and was Clinical Professor of Surgery at the Detroit College of Medicine and Surgery between 1918-1920. In 1923 he became Attending Surgeon at Grace Hospital, a position he held for many years until he became Chief of the Surgical Department. Doctor Hewitt was the author of numerous articles, chiefly on surgery, which appeared in local, state and national journals. He died October 17, 1940.

**Edwin C. Hoff** of Detroit, Michigan, was born April 20, 1875, in Carey, Ohio, and was graduated from the Cleveland Homeopathic Medical College in 1901. Following graduation, he came to Detroit to intern in Grace Hospital. Completing his internship, he established an office on West Fort Street. He remained in this location but a short time, moving to 101 Broadway. He moved his office to the David Whitney Building when it was erected in 1915. Doctor Hoff was a member of the State Homeopathic Society and a Fellow of the American College of Surgeons, as well as other organizations. He died October 23, 1940.

**Arthur E. Leitch** of Saginaw, Michigan, was born near Toronto, Ontario, Canada, in 1872, and was graduated from the Detroit College of Medicine in 1893. He first located in Ohio and then moved to Saginaw where he practiced for forty years. Doctor Leitch was a member of the staff of both St. Mary's and St. Luke's Hospitals. During the World War he served in the Medical Corps. In 1931 he was president of the Saginaw County Medical Society. Doctor Leitch died December 9, 1940.

**Moses Emmett Morton** of Detroit was born in Lowndes County, Alabama, in 1888 and was graduated from the University of Michigan in 1918. He located in Lowndesboro and later came to Detroit and opened an office in "Black Bottom" where he became the friend and teacher to many young Negro medical men in the art of surgery during their resident days. He was on the staff of Trinity Hospital. Doctor Morton died November 12, 1940.

**Herman G. Rosenblum** of Flint, Michigan, was born September 30, 1892, was graduated from the University of Pittsburgh and Toledo Medical College in 1919 and located in Calumet, Michigan. He served with the United States Air Service overseas for two years and was wounded twice. Following the war, Doctor Rosenblum gave up the practice of medicine and was associated with his father in the clothing business. Later he studied proctology under L. J. Hirschman, M.D., of Detroit and returned to the medical profession, opening his offices in Flint, March, 1934. Doctor Rosenblum died October 27, 1940.

**Bruno J. Sawicki** of Detroit, Michigan, was born in Cleveland, Ohio, May 15, 1889, and was graduated from Western Reserve College and the Detroit College of Medicine in 1917. In the World War he served as Captain in the U. S. Medical Corps. Doctor Sawicki had practiced in Detroit for twenty-four years and his death was the result of injuries sustained in an automobile accident near Bay City, October 12, 1940.

**Chester Ambrose Wilkinson**, of Kendall, Michigan, was born in Harveyville, Pennsylvania, January 8, 1862, and was graduated from the Jefferson Medical School at Philadelphia, Pa., in 1888. In 1890 he moved to Michigan, taking up residence in Kendall where he had lived for the past half century. Dr. Wilkinson was on the staff of Bronson Hospital. He died on October 11, 1940.

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# THE DOCTOR'S LIBRARY

*Acknowledgement of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

THE 1940 YEAR BOOK OF GENERAL MEDICINE. Edited by George F. Dick, M.D.; J. Burns Amberson, Jr., M.D.; George R. Minot, M.D., S.D., F.R.C.P. (Edinburgh and London); William B. Castle, M.D., A.M., M.D. (Hon.), Utracht; William D. Stroud, M.D.; George B. Eusterman, M.D. Chicago: The Year Book Publishers, Inc., 1940. Price: $3.00.

Forty years ago the first volume of the Year Book of General Medicine was published with Frank Billings as the principal editor. In this fortieth edition there are 934 pages instead of the original 274. The editors now include George Dick, George R. Minot and William D. Stroud. In addition to the usual review of the literature there are new features; such as, discussion of oral immunization against scarlet fever by Dick, Minot's and Castle's color plate on differential diagnosis of congenital hemolytic jaundice, articles by Stroud on digitalis, cancer of the stomach by Eusterman, and the physician and the tuberculosis campaign by Amberson.

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HEMORRHOIDS AND THEIR TREATMENT: THE VARICOSE SYNDROME OF THE RECTUM. By Kasper Blond, M.D., Vienna; Formerly First Assistant, Rothchild Hospital, Vienna; Hon. Consulting Surgeon, Municipal Hospital, Vienna; etc. Translated by E. Stanley Lee, M.S., F.R.C.S., Hon. Assistant Surgeon, Westminster Hospital. A William Wood Book. Baltimore: The Williams & Wilkins Company, 1940. Price: $4.50.

E. Stanley Lee of Westminster Hospital in London has worked with the author in preparing a new edition, in the English language, of the German edition published in 1935. Kasper Blond is an ardent proponent of the injection treatment of certain anal and rectal disorders and has achieved great success. The color plates are beautiful. The subject is treated in a very instructive manner. This monograph should be of value to any practitioner who does anal injection therapy.

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TABER'S CYCLOPEDIC MEDICAL DICTIONARY, Including a Digest of Medical Subjects. By Clarence Wilbur Taber, and Associates. 273 Illustrations. Philadelphia: F. A. Davis Company, 1940. Price: Cloth, Thumb-indexed $3.00; Plain $2.50.

This dictionary, a volume seven by five inches, contains fifteen hundred pages and almost as many words as the larger unabridged medical dictionaries. There are numerous illustrations and a legible type. Numerous tables, glossaries, etc., are included making it a very handy and useful desk volume.

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THE PRACTICE OF MEDICINE. By Jonathan Campbell Meakins, M.D., LL.D., Professor of Medicine and Director of the Department of Medicine, McGill University; Physician-in-Chief, Royal Victoria Hospital, Montreal; Formerly Professor of Therapeutics and Clinical Medicine, University of Edinburgh. Fellow of the Royal Society of Edinburgh; Fellow of the Royal Society of Canada; Fellow of the Royal College of Physicians, London; Fellow of the Royal College of Physicians, Edinburgh; Honorary Fellow of the Royal College of Physicians, Canada; Fellow of the American College of Physicians. Third Edition. With 562 Illustrations including 48 in color. St. Louis: The C. V. Mosby Company, 1940. Price: $10.00.

This is the third edition of Doctor Meakins' textbook on medicine first published in 1936. Noted for its many illustrations in the first two edtions, there have been additional cuts and color plates added which should aid the student and practitioner to a great degree. It is not a book to be used for quick reference but is quite readable. The newer discoveries of medicine are included and the general subject matter is carefully


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PHYSIOLOGY AND ANATOMY. By Esther M. Greisheimer, B.S. in Education, M.A., Ph.D., M.D., Professor of Physiology, Woman's Medical College of Pennsylvania Philadelphia; Formerly Associate Professor of Physiology The University of Minnesota, Minneapolis. 471 Illustrations of which 52 are in color. Fourth Edition, Revised and Reset. Philadelphia, London, Montreal: J. B. Lippincott Company, 1940. Price: $3.50.

Dr. Esther Greisheimer has written this volume as a textbook for the student nurse and the physical education student and approaches the two subjects in a correlated manner establishing the inter-relationship between physiology and anatomy. The pre-medical student who has read this book will find the later intensive study of these subjects in medical school much easier to absorb, and it should also prove of great value to the practitioner who wishes to refresh his memory on these subjects.

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FRACTURES AND DISLOCATIONS FOR PRACTITIONERS. By Edwin O. Geckeler, M.D., Fellow of the American College of Surgeons, Fellow of the American Academy of Orthopedic Surgeons, Diplomate of the American Board of Orthopedic Surgery. Second Edition. A William Wood Book. Baltimore: The Williams & Wilkins Company, 1940. Price: $4.00.

The claim of the publisher that here are "Foolproof Procedures for Practitioners" may be a bit extreme since there are no foolproof procedures in medicine (or in any other business or profession) but undoubtedly following the instructions given in this volume would considerably reduce the number of poor results in fracture work and the inevitable suits for malpractice. The extreme practicality of this three hundred page textbook for practitioners places it in the recommended class.


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*Morning Program*

1. Welcome by Harold W. Wiley, M.D., Lansing, President, Ingham County Medical Society.
2. "The Future in Legislation" (10 minutes).
   By L. Fernald Foster, M.D., Bay City, Secretary, M.S.M.S.
3. "Michigan Medical Service" (10 minutes)
   By Henry R. Carstens, M.D., Detroit, President-Elect, M.S.M.S.
4. "Medical Preparedness" (10 minutes)
   By Lt. Col. Harold A. Furlong, M.D., Lansing, Medical Board, State Selective Service Headquarters.
5. "How to Make Your County Medical Society More Influential and Successful" (20 minutes)
   By H. Van Y. Caldwell, Cleveland, Executive Secretary, Academy of Medicine of Cleveland.

*Noon-Day Dinner*

1:00 p.m.

"Michigan's New Intangibles Tax Law"
By Joseph H. Creighton, Manager, Intangibles Tax Division, State Tax Commission, Lansing.

*Afternoon Program*

Joint Meeting with State and County Health Officers

Paul R. Urmston, M.D., Bay City, President, M.S.M.S., presiding

1. "Industrial Health in Relation to National Defense" (10 minutes)
   By K. E. Markuson, M.D., Lansing.
2. "Immunization Schedule" (10 minutes)
   By W. C. C. Cole, M.D., Detroit.
3. "Tuberculosis Case Finding" (10 minutes)
   By A. W. Newitt, M.D., Lansing.
4. "New Five-Day Treatment for Syphilis" (10 minutes)
   By L. W. Shaffer, M.D., Detroit.
   Discussion Period led by H. Allen Moyer, M.D., Lansing, State Health Commissioner.

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### TRANSPARENT WOMAN DEDICATED AS PERMANENT EXHIBIT

After visiting cities from coast to coast on its public health educational tour during the last four years, where it was exhibited before important medical groups and to the laity under the sponsorship of various medical societies and Academies of Medicine, the Transparent Woman exhibit, sponsored by S. H. Camp & Company, was donated to the Medical Section of the Museum of Science and Industry, Chicago.

It is estimated that approximately eight million persons, including many thousands of physicians, viewed the exhibit on its tour of the nation.

Dedication ceremonies, which took place recently, were broadcast over NBC's national Blue network and participating in the program were Dr. Morris Fishbein, editor of the *Journal of the American Medical Association*, Dr. Eben J. Carey, curator of the Medical Section of the Museum and Dean, School of Medicine, Marquette University, Major Lenox R. Lohr, president Chicago Museum of Science and Industry, and Mr. S. H. Camp. Several hundred notables and distinguished physicians were present.

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### MICHIGAN PATHOLOGICAL SOCIETY

The annual meeting of the Michigan Pathological Society was held at the University Hospital, Ann Arbor, Michigan, on Saturday, December 14. Forty-four were in attendance. The scientific program emphasized demonstrations of various pathological manifestations of syphilis. There were demonstrations and scientific reports by Drs. C. V. Weller, W. L. Brosius, J. A. Kasper, F. W. Hartman, J. H. Ahronheim, G. Steiner, O. A. Brines, R. E. Olsen, C. H. Binford, C. E. Woodruff and W. M. German.

Dr. C. I. Owen demonstrated the lesions in a case of tularemia and Dr. Amolsch demonstrated the pathological process and etiological agents in a case of syphilis complicated by cutaneous manifestations of histoplasmosis.

A highlight of the program was the talk by Dr. John C. Bugher, formerly of Dr. Weller's staff, on his experiences in Columbia, in connection with the Rockefeller Commission on Yellow Fever.

At the business meeting which followed, the following officers were inducted into office for the ensuing year: President, Dr. J. A. Kasper; president-elect, Dr. A. Amolsch; secretary-treasurer, Dr. D. C. Beaver; councillors, Dr. G. L. Bond and Dr. W. L. Brosius.

The next meeting will be held on February 8, 1941, at Henry Ford Hospital in Detroit, probably jointly with the Michigan Roentgen Ray Society.

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# Coronary Vascular Heart Disease

By J. H. Musser, M.D.
New Orleans, Louisiana

John H. Musser, M.D.
*University of Pennsylvania, B.S. 1905, M.D. 1908. Practiced internal medicine until the War, when he spent two years in the Army. After returning to Philadelphia he became Associate in Medicine at the University of Pennsylvania and on the staff of three of the local hospitals. In 1925 he came to Tulane as Professor of Medicine, where he has been ever since. He also is Senior Visiting Physician at the Charity Hospital, New Orleans. Has at various times been president of the American College of Physicians, and vice president of the American Medical Association. At present is on the American Board of Internal Medicine, and the Council on Medical Education and Hospitals of the A.M.A.*

■ A recent editorial in the *British Medical Journal* discusses the result of the postmortem examination of the heart of the late Sir James Mackenzie. Mackenzie was undoubtedly, in the latter years of his life, the outstanding cardiologist of the English speaking world, if not of the whole world. He had an attack of heart pain in 1908, when fifty-five years old, which came on when he was at rest. This pain was severe and continuous for two hours. He was restless and obtained the most comfort when moving around. He took 10 grains of veronal and then fell asleep. The next day he was entirely well but he did notice that the pain could be brought on by such measures as walking in cold air, or after a full meal. All this case history, incidentally, is described anonymously in his well known book on angina pectoris. It was not until 1922, however, that these attacks of cardiac pain became severe enough to necessitate his cutting down markedly on his activity. As result of the effect of the cold, bleak, windy weather on his heart pain he had to give up his work so auspiciously started at St. Andrews and to return to London. From that time on to his death he had several severe attacks when peaceful and quiet. When he was seventy-two years old, January 25, 1925, he had an extremely severe attack and death occurred the following day without pain.

Now Mackenzie was a man who had studied angina pectoris the greater part of his medical life. Angina pectoris fifteen years ago was almost synonymous with the name of Mackenzie and yet Mackenzie, in his various publications and books, never recognized the association of angina pectoris and coronary closure. He recognized the condition of status anginosus but apparently did not appreciate this continuous heart pain as due to cardiac infarction.

At autopsy it was found the left ventricle was large and thick walled. In the heart muscle were several small whitish patches of fibrous tissue. In the anterior wall there was a patch of fibrous tissue of considerable size with another smaller area in the posterior wall about half way between the apex and the base. At the extreme base there was a recent hemorrhagic infarction. There was extreme thickening of the wall of the coronary vessels and diminution of the lumen. The pathologist who made the examination concludes that Mackenzie undoubtedly suffered from several attacks of closure of the smaller branch of the coronary vessels, the first occurring seventeen years before he expired, and the last just before he died.

## History

These notes from the editorial of the *British Medical Journal* are significant. It was one of the peculiar ironies of life that such an outstanding cardiologist, living until only fifteen

years ago, did not recognize coronary occlusion. It also showed that this disease, while undoubtedly of considerable frequency in bygone days, nevertheless was not recognized. Although the clinical syndrome was described by two Russians, Obratzow, and Straschesko in 1910, and in 1912 an American observer, Dr. Herrick, it is the general concept that coronary arterial disease really had its beginning in scientific medicine at this time but this statement applies largely to the clinical recognition of cardiac infarction. These two papers fell like "duds," to quote Dr. Herrick. There was no repercussion until nearly six years later, when a second paper by him aroused the interest of the clinician and cardiologist, probably as a result of the revival of interest in the anatomy and physiology of the heart stimulated by the work of men as His, Tawara, Keith and Gaskell.

At a Frank Billings Lecture delivered by Dr. George Dock, he reviews most carefully and deeply from the time of Heberden to Osler the historical features of coronary closure. Dock points out that there were many pathologists who recognized local fibroid degeneration of the heart muscle and the association with coronary arterial disease. The pathogenic relation of the coronary arteries to heart disease was well understood by the pathologist of fifty years ago. Dock questions why it was that if the pathologists and those at the mortuary table knew the importance of cardiac infarction and its dependence upon coronary disease, why was it not clinically recognized and accurately treated. Dock's historical paper is particularly interesting because he is believed to have been the first man to make the diagnosis, doing this in 1896. However, the importance of his contribution was not recognized either by himself or by the medical profession.

Krehl, the great German clinician, and Huchard, an equally famous Frenchman, in the first part of the present century recognized the association of angina pectoris with coronary occlusion.

To Herrick we are indebted for bringing this condition to the attention of the medical profession. He wrote that the condition could be recognized during life; it was not necessarily fatal; that it was a readily recognized clinical entity and that the symptoms could be analyzed so that differentiation could be made between angina pectoris and this present condition I am discussing.

Among the names of those who have been interested in this syndrome should not be forgotten the name of Libman who, in 1919, stressed the importance of pericardial friction rub and leukocytosis as diagnostic findings of great value.

Lastly, it is appropriate that I should mention the book, edited and written in part by Robert L. Levy, on "Diseases of the Coronary Arteries and Cardiac Pain." This book, of some 400 pages, was compiled by the editor working with a group of well known cardiologists, physiologists and anatomists. It is most complete and of inestimable value.

In order that one should not think that the subject is largely a disease in which the American clinicians are primarily interested, I might state that in my library I have a series of monographs prepared by Guillermo A. Bosco of Buenos Aires which is a tome of some 755 pages and to which he is continually adding. Just within the last few months I have received a fourth and a fifth part of this book containing respectively 183 and 140 pages, indicating that South American physicians are likewise taking a lively interest in this very important disorder of the heart.

## Etiology

Coronary occlusion may occur in almost any age period, in the old individual it may be expected; in a young person however, the occurrence of this condition is quite unusual. Jamison and Hauser[8] reported an instance in New Orleans of a very young man which was confirmed by autopsy. Levine,[9] in his paper which appeared in *Medical Monographs,* discovered only three of 145 people in whom the disease developed under forty years of age. A. Stuart Ferguson and Lockwood,[4] in a review of the literature of this condition as it occurs in young people, in turn report a patient who recovered who was only twenty-six years of age. However, merely because a person is young is no reason why the syndrome should not be diagnosed if it is classical in character, otherwise there is no doubt but that it will probably be overlooked.

One of the most comprehensive statistical studies made on this condition is a paper by Master, Dack and Jaffe[13] who report upon the age, sex and hypertension in a group of 500

patients. In this group the youngest was aged twenty-seven, the oldest eighty-seven. The average age at the time of the first attack was 54 and the first attack occurred most commonly in the sixth decade of life. In the several age groups the order of frequency was as follows: 26 per cent in those in the seventh decade, 25 per cent in the fifth decade, 33.7 per cent in the sixth decade, under forty years of age, 10 per cent, and over seventy-nine, 5.4 per cent.

### Sex

The sexual difference is marked. The males are very much more frequently attacked than females. Parkinson[14] states that 93 per cent of his patients were men. Statistics collected by the Metropolitan Life Insurance Company show a rate in males of 16 per 100,000 as contrasted with 3.5 among women. In Master, Dack and Jaffe's paper 77.4 per cent were men, 22.6 per cent were women. Every clinician knows that it is the man who is more frequently attacked than the female but among those who have a fairly large female clientele the incidence would seem to be higher than these statistics would imply.

### Occupation

Occupation is apparently an extremely important predisposing factor. The general concept is that the disease is largely one which is particularly likely to attack those of the upper income group, business and professional men in other words. This contention may be substantiated by the large number of doctors whose deaths are recorded yearly, as I will mention later, who died as result of coronary occlusion. On the other hand, Levy[10] denies this implication and in his over 2,500 necropsy studies it was found that foremen and skilled workers showed 44 per cent coronary lesions, whereas among executives and members of professions the percentage was 34.3, with manual laborers slightly under these figures. Despite this statistical observation, when the physician glances at the obituary columns of the *Journal of the American Medical Association* he is astounded at the number of deaths that occur in the medical profession as result of coronary occlusion or infarction. It has become the commonest cause of death among doctors. A recent editorial[3] in the *Journal,* discussing the obituary of physicians who died the preceding year and summarizing the cause of death, points out that heart disease is the leading cause of death of physicians; for example, 1,585 heart deaths as contrasted with the next most frequent cause, namely arteriosclerosis with 453 deaths, followed by pneumonia with 370 and cancer with 357. It should be noted that when the figures for heart disease are broken down, coronary arterial disease, either thrombosis, occlusion or angina pectoris, resulted in the death of 676 physicians or more than any other one cause of death. Probably this number would be increased considerably were there given an exact cause of death, because "myocarditis" which in the ultimate analysis is usually due to coronary disease, caused 534 deaths. Then there was a group of cases which were labeled as "other diseases of the heart."

### Heredity

To my mind in so far as predisposing factors other than age and sex are concerned, heredity ranks first. Whether the constitutional make up is responsible for the marked hereditary tendencies in this disease, many patients are overweight which in turn in many instances is an inheritable characteristic, or whether it is some peculiar arrangement of the coronary vessels which may predispose them to strain, is a debatable question. Dublin believes that if there is any relationship between heredity and coronary disease it is based upon overweight because in people who die of angina pectoris, which of course often is coronary disease, the death rate was twice that of those who had normal weight, two and a half times more frequent than in those who were underweight.

### Chronic Disease

*Diabetes.*—I will not comment upon diabetes except to call attention to the fact frequently reiterated and repeated, that arterial disease anywhere in the vascular tree is common in the diabetic individual, so that it is natural to expect the coronary vessels would not escape the general vascular involvement. Furthermore, these people are often a more advanced age group.

*Hypertension.*—The question of hypertension has agitated medical men for a long period of time. However, hypertension is by no means a

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*sine qua non* for the diagnosis of the condition. Particularly does this statement apply to men because in the statistics quoted, as compiled by Master et al.,[13] hypertension was noted in only 62 per cent of the cases as occurring in men and in approximately four-fifths of the women. It may be seen that it is definitely higher in women but not necessarily is a relatively low blood pressure unusual in a man who has this condition.

*Other Factors.*—Other factors such as infections, notably syphilis, the use of alcohol and tobacco or caffein, probably play only a minor rôle in the production of sclerosis of the coronary vessels. The disease syphilis rarely is an etiologic factor of importance; were it so the death rate from this condition, coronary occlusion, would be very much more common than it is among the Negro in whom the syphilitic incidence is high, whereas the coronary occlusion rate is low.

## Pathology

Time does not permit a discussion of the pathology in detail. I would like to call attention, however, to a splendid clinical pathologic study made by Blumgart, Schlesinger and Davis[2] which appeared in the January number of the *American Heart Journal.* It is a long, lengthy paper from which I would like to point out one or two important conclusions. It is quite possible for a patient to develop coronary thrombosis and myocardial infarction without any characteristic clinical manifestations. If a gradual occlusion develops over a period of years, during this protracted interval of time there develops an anastomotic circulation, so that all direct symptoms and signs will be absent.

In regard to the pathologic basis for congestive failure, these authors note that certain areas in the heart, undernourished as result of coronary arteriosclerosis, when subjected to greater anoxemia produced by exertion or emotion, develop focal necrosis and diffuse fibrotic changes. This replacement by connective tissue ultimately produces myocardial weakness and finally congestive failure.

The left coronary artery, shortly after its origin from the sinus of the left posterior aortic leaflet, divides into two main divisions, the anterior descending and the circumflex. The anterior descending branch is the artery most frequently involved. As this supplies, as it does, the anterior wall of the right and left ventricle and part of the interventricular septum, it is natural that one of the outstanding physical findings, namely a pericardial friction rub which so often determines definitely the diagnosis, is likely to be produced in some instances in which the area of infarction is sufficiently large to extend out to the parietovisceral pericardium. Likewise involvement of the interventricular septum from time to time will produce heart block, although this complication is relatively rare. Usually it is the right coronary that will bring about this particular condition in 93 per cent of cases, according to Ball.[1] As a matter of fact complete auriculoventricular block from occlusion of the usually involved vessel is apparently rare, as substantiated by a recent paper by Heninger and Dickens.[6]

## Symptomatology

It is the general concept that an occlusion of the coronary artery which produces symptoms, is precipitated by some extrinsic factor, be this exercise, excitement, emotion, eating or what not. As was pointed out in a review of the literature by Graybiel[5] "one cannot help being impressed with the fact that many persons with marked coronary atherosclerosis never suffer acute coronary occlusion and cardiac infarction. This being so, there must be precipitating factors of coronary occlusion; the occlusion cannot be regarded as a purely fortuitous event." Be that as it may, every clinician is familiar with the patient who has had his first attack at night during sleep or while completely at rest. If the patient is asleep it might be assumed that a dream of some kind or another may have altered the dynamics of the cardiac circulation to produce the occlusion.

I will not endeavor to recite to you the usual characteristic symptoms of coronary occlusion. They have been dwelt upon so frequently and reiterated so many times that every one is familiar with the syndrome of heart pain, followed by shock, succeeded by fever, leukocytosis and shortness of breath. I would like to point out, however, that pain may be entirely absent or it may be so slight that it escapes the patient's attention. This, of course, is unusual but given an individual who, without cause, may develop

acute dyspnea or pulmonary edema, even if this individual is middle aged, has some slight hypertension and is somewhat overweight but who does not have previously known myocardial or endocardial disease notably of the aortic valves nor does he have marked hypertension, it is quite possible that this patient will have or has had coronary occlusion with infarction. Substernal pain, as pointed out by Herrmann and Decherd,[7] in an analysis of some 230 cases, may be quite atypical. Of the 127 patients in whom the symptom of pain was analyzed, twenty-six of them had atypical substernal pain and quite a group had pain which was referred only to the epigastrium, a well known clinical observation which sometimes still confuses and makes possible the occasional reporting of a death of a patient as being due to "acute indigestion" when it is the result of coronary disease. Pain may be referred to the right shoulder only, to the neck, to the interscapular region or even to the right chest and leg. Of course pain is undoubtedly the most important diagnostic expression of the disease but it must not be forgotten that the condition may develop without even discomfort.

DIFFERENTIAL DIAGNOSIS OF ANGINA PECTORIS AND THE PAIN OF MYOCARDIAL INFARCTION

| | *Angina Pectoris* | *Coronary Thrombosis* |
|---|---|---|
| Onset | During exertion | Usually during rest or sleep |
| Attitude | Immobile | Restive; may walk about |
| Site of pain | Sternum to arm | Sternum or lower |
| Duration | Minutes | Hours or days |
| Dyspnea | Absent | Usually severe |
| Vomiting | Rare | Common |
| Shock | Absent | Present |
| Sweating | Slight | Severe |
| Facies | Normal | Ashen pallor |
| Pulse | Unchanged | Feeble, often rapid |
| Temperature | Unchanged | Subnormal, then febrile |
| Blood pressure | Unchanged or raised | Lowered |
| Heart failure | Absent | Often follows |
| Heart sounds | Unchanged | Gallop rhythm, friction |
| Leukocytosis | Absent | Present |
| Electrocardiogram | May be abnormal | Often diagnostic |
| Action of nitrites | Often relieved | No relief. |

### Differential Diagnosis

In this connection in conjunction with the symptom of pain, I would like to point out that the differential diagnosis of the pain of angina pectoris and the pain of coronary occlusion is of extreme importance not only from the prognostic standpoint but also from the viewpoint of the immediate and later care of the patient. It is for this reason that I am presenting a tabulation, as compiled by my associate, W. A. Sodeman, of the important diagnostic points which may help differentiate these two conditions. Incidentally, it will demonstrate also the important diagnostic features connected with the two conditions.

### Prognosis

Personally I am of the impression that the cumulative data which have to do with the ultimate outcome in coronary occlusion are worthless. I say this advisedly and for several reasons. Statistics that have been compiled have to do with patients who have acute atypical attacks. The experience of all clinicians has been that it is by no means infrequent for people to have mild unrecognized attacks, sometimes discovered accidentally as result of a coronary electrocardiogram. Sometimes these minimal or minor attacks are only recalled by the patient when he has had a major attack and the history is gone into carefully. Undoubtedly there are many patients who do have attacks which are recognized and who continue to go about actively and vigorously. Parenthetically I might remark that Lewis,[11] for example, reported on a patient he had seen some seven years prior to the appearance of this patient and who since that time had done most strenuous activities of all kinds, from flying at altitudes of 15,000 feet to skiing each winter and dancing ad lib. It is possible to generalize to this extent, that the older the patient is the more likely that patient is to succumb and the younger the age of onset the greater is the life expectancy.

Another statistical study, which in this instance has to do with what occurs to the man who has had an acute coronary artery occlusion, is that of Master and Dack.[12] These observers sent out a questionnaire to a series of 415 patients; 185 of whom were private patients and 230 ward patients. The purpose was to determine how much could be done and was being done by a person who had sustained and survived

an acute attack. The authors showed that 53 per cent of patients returned to work after recovering from their occlusion, 57 per cent of whom were private patients and 50 per cent were ward patients. It is of some interest to note that 84 per cent of professional people returned to work and particularly physicians. It is not surprising that age played an important rôle in the ability of the person to resume his usual occupation. As with the prognosis, so in this study it is found that the younger the individual the more likely was he to return to his previous work status. Some of these patients never did stop work, a considerable per cent (48) of them stopped for less than three months. From three to six months was the time period of convalescence from the attack of 22 per cent. One individual did not return to work for six years. Rather interesting that a certain number of the group did not return because they were advised not to, although apparently they were in good condition, and a fairly considerable number, more than those who were physically unable, did not start working because of disability insurance. The chief cause of the inability to return to work was a physical disability resulting either from angina pectoris, dyspnea or from weakness. The concluding paragraph comments to the effect that "an attack of acute coronary occlusion in itself is not sufficient reason for permanent disability. Complete recovery and full or partial economic restitution are common. Heart failure or a severe anginal syndrome is evidence of complete disability." These statements confirm that which is well known and bring further comfort to the man who has had coronary occlusion, that his attack is not necessarily associated with economic dependence.

## Treatment

The treatment logically divides itself into three phases: (1) immediate, (2) mediate, and (3) later.

For the immediate treatment the patient should be handled as any patient who has shock—morphine, warmth, absolute quiet but avoiding stimulation. This applies particularly to cardiac stimulants. Be satisfied with giving glucose solution intravenously and letting the glucose act as a maintainer of cardiac reserve. Avoid digitalis and its products unless it looks as if the patient is going to die of heart failure, under which circumstance make use of ouabain. In giving the sugar solution give it by mouth, approximately 1,200 c.c. in twenty-four hours. If it is absolutely essential to give fluid into the vein, then inject not more than 100 c.c. of 50 per cent glucose. Very generally there has come into use a drug, quinidine, in order to prevent the fatal complication of ventricular fibrillation; give 5 grains (.32 mg.) every three hours for several days. Use adrenalin or ephedrine only as a last resort. Oxygen should, by all means, be used and if the patient is breathing with difficulty and there are basal râles, tachycardia and/or gallop rhythm. The oxygen want should be met by external administration.

The mediate treatment consists of absolute rest for a period of at least three weeks. The patient should be kept in bed and restlessness should be controlled by sedatives. In order to avoid venous thrombosis the lower extremities should be moved from time to time but this should be passive rather than active. The xanthine preparations are started at this time. Incidentally, caffein sodium benzoate intramuscularly is the best stimulant during the period of shock. Aminophyllin is begun and is continued indefinitely, four tablets a day. The patient should be allowed to get up gradually in about six weeks. After three weeks in bed the patient can move about rather freely but should not even have toilet privileges.

Subsequent treatment should aim to get the patient back to a normal life. For a period of six months active exercise is interdicted and for a year the patient should avoid excesses in everything, eating, drinking, physical or sexual. I would urge above everything else that this patient be encouraged to get back to a normal life and call attention to the figures I quoted in the first part of this paper which showed that a very large number of patients, if they do not have fear of sudden death thrust upon them at all times, are able to, can and will get back to a relatively normal existence.

## Summary

I have given you a rather fragmentary presentation of an extremely common disorder. Much has been written about the condition clinically and great has been the experimental work in the past twenty years, consequently much is

known about a condition about which, up until 1918 following the second paper of Dr. Herrick of Chicago, practically nothing was known. It would be impossible in a short time to present the innumerable facts concerning coronary occlusion. Many questions may arise in the minds of my auditors as they listen to the few remarks that I have just made, but they can not be answered in a short dissertation on a subject which is book length in extent.

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### WARRIORS AGAINST DISEASE

American medicine, as an authority recently observed, has a weak spot. It is not a weakness affecting the patient—the sick man or woman anxiously seeking a return to health. Curiously enough, this weakness has helped the patient—for the weakness lies in the fact that the medical profession has been so busy fighting disease in experimental laboratories as well as at the bedsides of the ill that it has found little time to tell the public of its tremendous achievements.

The undeniable record is there for all who wish to read it. And it tells, through the figures, a dramatic and inspirational story of an endless battle against disease and suffering and death.

That battle has won victory after victory. In the period of a century and a half in this country, the life expectancy of man has nearly doubled from thirty-five to sixty-two years. During that time, typhus, once one of the greatest killers, has all but disappeared. Smallpox and diphtheria, dreaded specters not so long ago, have been robbed of their terrors. Other great scourges—typhoid, diabetes, tuberculosis—have been brought under control, and their mortality rates steadily reduced. . . .

Medicine is not an industry. But, like industry, it has rendered its greatest service to the people under a system which places no brakes upon the achievements of the individual, and which encourages any man, in any field, to develop his talents to the utmost.—*Lapeer County Press*, Lapeer, Michigan, Jan. 8, 1941.

# Unusual Hypertension

## A Case of Ten Years' Duration*


By Hugh Stalker, M.D., F.A.C.P.
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■ SINCE it has been estimated that nearly 100,000 people die annually in the United States as the result of heart failure because of hypertension and that many more die from cerebral accidents and renal insufficiency, it is well to pause and give thought.

The systolic pressure in established hypertension varies from 150 to over 300 millimeters of mercury but it is usually about 200; the diastolic pressure varies from 90 to 180 but is usually about 110. The pressure readings (especially systolic) vary greatly among different individuals and on different occasions in the same individual. Repeated measurements must often be made before the customary blood pressure levels for a patient are discovered, uninfluenced by excitement, exertion, or fatigue. A very high diastolic pressure is usually a bad sign and a constant finding of such a pressure over 130 millimeters of mercury means that but a few months or years of life remain.

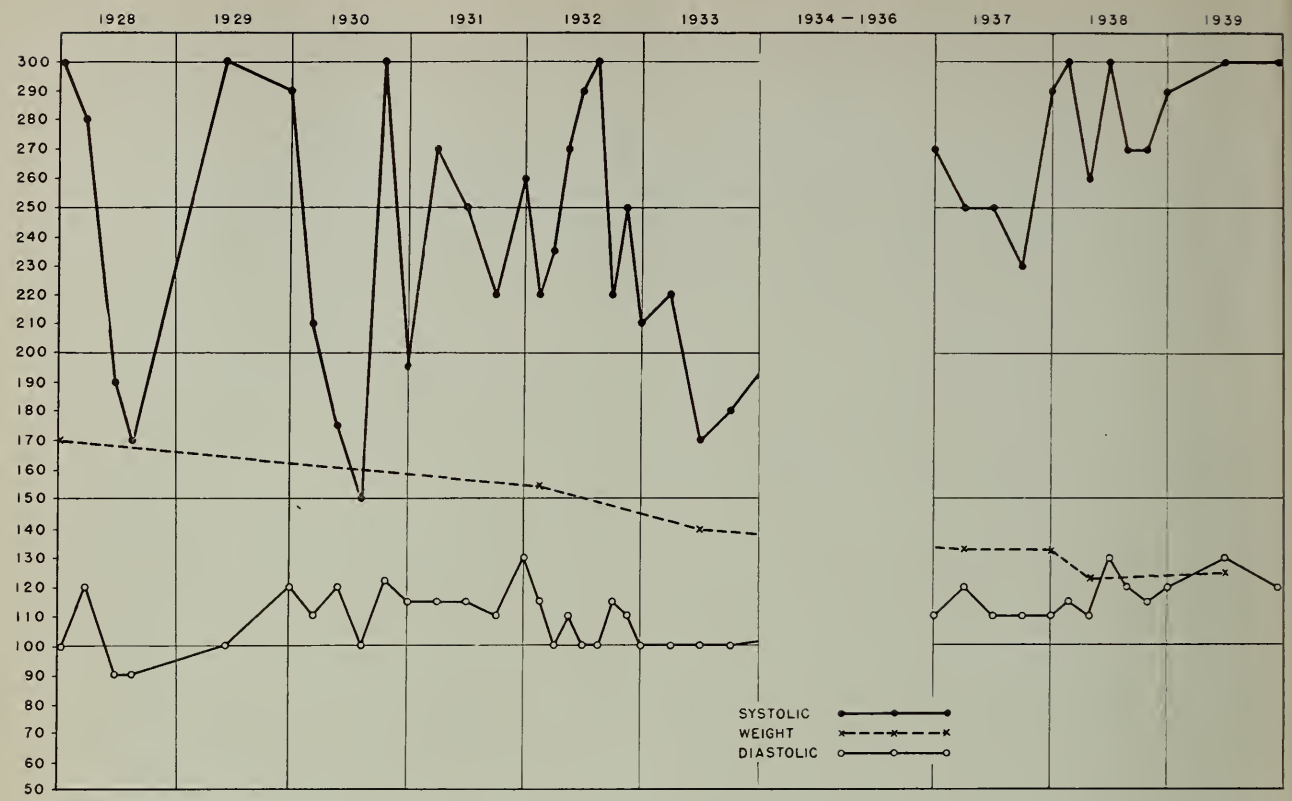
The following history is of a patient who first came to us in 1928, with a systolic blood pressure of 300 plus. Her blood pressure has remained high and now, eleven years later, shows the same systolic pressure; her retinæ show remarkably few pathological changes and her kidney function is very good.

### Case History

A colored woman, now fifty-five years old, was first seen by us in 1928 when she complained of dyspnea on exertion and dizziness which she had experienced since 1924. In 1928 she started to have headaches. She had black spots in front of her eyes and became dizzy when reading; there was no epistaxis.

*Family History.*—Mother and father died of strokes, the former at fifty and the latter at sixty. Her first

*From the Cardiology Clinic, Harper Hospital.




husband is dead. Her second husband is living and well. One son living but tuberculous.

*Physical Examination.*—Weight 170 pounds. There were many snags of teeth, enlarged tonsils, marked pulsations of carotids and in supra-sternal notch, some râles at the bases posteriorly, the heart was enlarged to the left, there was a systolic murmur at the base and both systolic and diastolic at the apex. The blood pressure was 300 plus/110. There was no edema of the extremities. Rectal examination showed external and internal hemorrhoids. The blood and urine were negative. Blood non-protein nitrogen 30 mgs., and blood sugar 0.95 mgs.

*X-ray Examination.*—On March 30, 1929, the heart showed definite left-sided enlargement. Aortic shadow of normal size. No substernal thyroid. Slight increase in root infiltration.

*Electrocardiogram.*—Regular rhythm. Sinus arrhythmia. Marked left axis deviation. Inversion of T 2 and 3. Flat T 1. S-T 1 and 2 depressed. S-T 3 elevated. Conclusions: Marked myocardial damage.

*Immediate Progress.* While she was in the hospital with rest, diet, sodium bromide and chloral hydrate, and erythroltetranitrate, the blood pressure dropped to 170/90. Her menopause was about the middle of 1930. The patient was then seen at intervals in the outpatient department to October, 1933, and it was always noted that her blood pressure was in the hypertensive group. Once she complained of numbness of the left side of the face, the left arm and leg, but there was no disturbance in sensation. There was occasional shortness of breath and at different times she was given digitalis but never continued with it. Her electrocardiograms showed progressive myocardial degeneration.

*Fundi.*—On October 10, 1930, the fundi were within normal limits. Some of the vessels in the region of the discs showed presence of slight sheathing; some of the arteries were tortuous; venous pulsations presented a picture suggestive of arteriosclerosis.

*Further Progress.* We lost sight of the patient until February, 1937, at which time she showed a blood pressure of 280/100. The red blood cells were always essentially normal and there was only a slight reduction in the amount of hemoglobin. The blood non-protein nitrogen was always normal and the blood Wassermann test was always negative. She complained occasionally of being dizzy, tired, and listless. Her weight became progressively less. In 1938 there was a question of numbness of the left side of the body which appeared to increase. A neurologist made a diagnosis at that time of small but recurrent right sided cerebral hemorrhages. Occasionally she acknowledged some relief from phlebotomy and also was given sodium nitrites, capsules of theobromine and phenobarbital, digalen, and epsom salts. Her second husband died in October, 1938. In December her subjective symptoms were some shortness of breath, dizziness, and headache. There was no edema of ankles and feet. An electrocardiogram in May, 1939, gave the appearance of an old posterior infarction.

*Fluoroscopy.*—On March 30, 1939, a *fluoroscopic* study of the chest showed normal position of the diaphragm leaves with clear costophrenic sinuses and clear lung fields. The heart was enlarged in its transverse

diameter with particular enlargement in the left ventricular area which extended downward and towards the left and also posteriorly to a marked degree. No intracardiac calcification was demonstrable. The beat seen along the left border was regular and of small amplitude. There was very marked dilatation of the thoracic aorta although there was no aneurysmal dilatation at any point. The aorta exhibited a marked pulsation throughout. A radiograph taken at the six-foot distance showed considerable calcification in the transverse arch and the following measurements:

| | |
|---|---|
| Internal diameter of chest | 27.1 cm. |
| M L | 10.8 cm. |
| M R | 5.0 cm. |
| G V | 7.6 cm. |

*Kymography.*—A kymographic study in the anteroposterior and left lateral projections showed a regular cardiac beat of moderate rate and a very small amplitude in the left ventricular area suggesting myocardial damage. The pulsations of the aorta were of unusually large amplitude.

*Eyes.*—On June 14, 1939, vision in right eye was 20/100; left eye, 20/30. Pupils reacted to light and accommodation. Fundi revealed no evidence of hemorrhages. Vessels were quite small and wavy towards their periphery. They also showed white streaks along the surface but no other evidence of hypertension. Disc normal on appearance. No lens changes. The blood pressure in the right arm was 300 plus/110; in the left arm 290/110. Weight 122 pounds.

### Discussion

A case of extreme systolic hypertension is presented in a colored female which was first diagnosed two years before the menopause. It has progressed for eleven years most of that time under observation with very few signs of heart failure or retinal changes and good kidney function. She has shown no signs of hyperthyroidism,[1] large vessel sclerosis, coarctation of the aorta, or arteriovenous communication and psychically is a quiet, rather phlegmatic, individual. (Recently she asked my advice about remarrying). Hence the diagnosis must primarily be essential hypertension.

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The attention of the medical profession is directed to the appearance of a special issue of *Harofe Haivri* (The Hebrew Medical Journal), a semi-annual publication, edited by Dr. Moses Einhorn. This volume commemorates the thirteenth anniversary of this journal and is dedicated to Prof. Sigmund Freud.

# The Undescended Testis

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■ In the descent of the testis the gubernaculum testis is not attached to the scrotum but to the peritoneum and to the fascia which surrounds the process of peritoneum which comes to be known as the processus vaginalis. The gubernaculum testis is also attached to the pubic spine and the perineum. Therefore, while a prominent rôle has conventionally been assigned the gubernaculum in guiding the testis to its normal scrotal position, it can only do so insofar as the processus vaginalis develops normally, descends normally through the inguinal canal and into the scrotum.

The physiological forces which control the development and normal direction of the processus vaginalis are not at all certain but it was proved experimentally in 1932[6] that the testes of immature rats and monkeys could be caused to descend by the administration of extracts of the anterior pituitary or pregnancy urine. The author noted in a series of experiments on rats in 1933 that the immature male was a better animal upon which to demonstrate the presence of A.P.L. than the immature female of the same age by virtue of the speed with which the testes descended after the injection of pregnancy urine or extracts containing A.P.L. Coincidentally, the seminal vesicles increased several times in size. These animals were twenty-one to twenty-five days old and younger animals were not used; but it is known from reports in the literature that more immature animals are more refractory to anterior pituitary or anterior pituitary-like hormones.

**So far as I am aware, the human infant is the only mammal to exhibit descent of the testicle normally at birth. This fact has been quoted to indicate that the organ has been acted upon prenatally by the hormones circulating in the mother's blood, i.e., anterior pitui-**

tary-like hormone, to cause descent, for the human female is the only one in whom this hormone can be demonstrated in the urine during pregnancy.

A similar hormone is demonstrable in the blood of the pregnant mare for a few weeks during pregnancy but there are some differences in the biological behavior of A.P.L. as found in human pregnancy urine and the hormone of pregnant mares' serum.

### Spontaneous Descent

Despite the implication that the undescended testicle will remain refractory to hormone stimulation since it did not respond to A.P.L. during intra-uterine life, we are nevertheless confronted by the indisputable fact that the majority of undescended testes will descend during adolescent years. The figures vary widely;[3,7,12] but all are agreed that the various army statistics which indicate an incidence postpubertally of two or three cases per thousand men probably reflect the true incidence of undescended testicle in the adult. Therefore, Johnson,[7] who saw seventeen cases per thousand in over thirty-one thousand prepubertal boys, aptly inquires as to what happens during puberty to the other fifteen cases per thousand. In his five hundred and thirty-four cases, there was spontaneous descent in three hundred and thirteen, the age of spontaneous descent falling between seven and seventeen years, most being between nine and fourteen years.

Since undescended testicle is not commonly seen in association with Fröhlich's syndrome, it is unfair to assume that pre-adolescent hypopituitarism is commonly the cause. Nor can a lack of A.P.L. in the mother be considered as the reason for the failure of descent. The obvious conclusion is that the cause rests either in the testicle itself as a refractory effector organ or in developmental mal-development of the processus vaginalis and/or the gubernaculum testis.

### Clinical Classification

Various classifications have been advanced,[3,10] the most useful being a clinical one:[3]

1. Those with an associated endocrinopathy.
2. Those with fixed mechanically retained testes or ectopy.
3. Those with movable testes which may be manipulated into the scrotum.

### Treatment

*Associated Endocrinopathy.*—There is agreement that patients presenting other evidence of endocrine abnormality should be treated endocrinologically.[5,9,13,14] Thus it follows as a matter of course that the proper hormones will be exhibited in those patients with mental, physical or osseous retardation irrespective of the concomitant presence of cryptorchidism. Delay of appearance of epiphyseal centers with or without mental retardation will call for thyroid treatment; but the practitioner will probably prefer to exhibit A.P.L. in the dosages to be mentioned later if his patient is cryptorchid and not too young. Likewise Fröhlich's syndrome will be treated with thyroid, diet and anterior pituitary-like substances and if one or both testicles happen to be undescended in such a patient, descent of the organs will be accepted as an added dividend. I have not seen dwarfism in a young boy, but I should expect that this pituitary syndrome would be as refractory insofar as the gonads are concerned as it is in the young girl.

**These cases frequently respond well to growth hormones but it is the usual thing for attempt at gonadal stimulation to fail.**

*Mechanically Fixed Testes.*—There is no hurry in treating cases of undescended testicle unassociated with other endocrine defects. Prepubertally, the undescended testicle is no different histologically than the normally placed organ.[12,17] Indeed, with the record of spontaneous descent which has been quoted one might inquire as to whether the condition should be treated at all. The reasons most frequently given for early treatment, either hormonal or operative, are:

1. Histological damage to the testicle retained after puberty.
2. The possible occurence of carcinoma.
3. The possible occurrence of infection and injury.

The first of these is far and away the most important. Evidence that the retained testicle is more frequently infected or more frequently the site of carcinoma is not too conclusive.[2] There is ample evidence, however, that the retained testicle is different histologically postpubertally than the normal organ.[3,11,12,17] Whereas at

puberty the normally descended testis grows sharply and develops spermatozoa, the undescended organ grows slightly, develops usually only spermatogonia, rarely spermatozoa and later the germinal epithelium atrophies. Sterility is the rule in bilateral cryptorchidism,[10] the cause apparently lying in the increased heat to which the organ is subjected.[11]

**It would seem reasonable therefore to prescribe treatment in all cases of bilateral cryptorchidism even though the chances for normal descent are greater than those for continued nondescent because of the loss of fertility which is bound to occur should the condition persist. Likewise, it would seem reasonable to prescribe treatment in unilateral cryptorchidism even though the chance of injury to organs retained in the inguinal canal be slight because hormone treatment is harmless and may accomplish complete results. Further, should hormone treatment fail, we shall have diagnosed those cases belonging in this category of the classification, i.e., those with mechanically fixed and retained organs.**

Short of operation, the patient belonging in this category cannot otherwise be accurately diagnosed. It then becomes necessary to determine the age at which treatment had best be applied. If there is no other associated endocrinopathy, I see no objection to waiting until near puberty or the first years of puberty to prescribe hormone treatment. In fact the statistics relative to spontaneous descent would appear to demand delay.

*Migratory Type.*—The patient belonging in the third category of the classification, i.e., those with migratory testes, will almost inevitably show spontaneous descent. These cases require no treatment, obviously. But I see no objection to treating those in whom a low scrotal position is never seen for the same reason already given, viz., that one cannot positively determine whether or not mechanical obstruction is present.

## Endocrine Therapy

Having decided to treat these patients and having decided the age limit during which treatment should be prescribed as preferably nine to fourteen years, one is faced with the necessity of choosing the endocrine substance to be exhibited. You will recall that anterior pituitary-like hormone is thought to exert its effect upon the patient's own pituitary gland, initiating the discharge of pituitary gonadotropic hormones. Because of its ready availability this substance has been most widely used in treatment of cryptorchidism. In addition, more latterly there have been available the pituitary hormone from pregnant mares' serum (Gonadogen) and one of the testicular hormones itself, testosterone, used as testosterone propionate. With the latter two substances I have no experience and merely wish to point out that the reports in the literature to date are too meager and too unsatisfactory to warrant further comment[8,9] and that the pituitary hormone as it is now available extracted from the gland itself is not to be preferred over anterior pituitary-like substance.[1] It is therefore apparent that our choice of therapeutic material is limited to extracts of pregnancy urine (A.P.L., Antuitrin-S, Follutein, et cetera.).

*Dosage.*—A review of the literature would indicate that doses of from 100 R.U. twice weekly to from 100 or 1000 R.U. daily have been administered. The total effective dose reported has varied from 2400 to 7500 R.U.[1,4,12,14,16] and the total duration of treatment has been reported by these same authors as from three to twenty-five weeks, the average being about 2 months. I am in agreement with the discussant of one of these papers[16] that our peak dose need not exceed 1500 R.U. weekly. This would mean in the case of concentrated Antuitrin-S containing 500 R.U. per cubic centimeter a dose of 1 c.c. three times a week which can if you wish be given by the parents at home similarly to the administration of insulin to diabetic children.

This dose had best be obtained by degrees. We do not see the local or constitutional reactions with Antuitrin-S today as were seen a few years ago when the first products were released for commercial consumption. It is, nevertheless, my habit to give 100 R.U. per dose during the first week of treatment, increasing to 250 R.U. per dose in the second week and thereafter administering 500 R.U. per dose two or three times a week.

## Results

The results to be expected from hormone treatment have been amply recorded. Permanent

descent in 61 per cent of treated cases as reported would appear to be entirely too high a result. As you are well aware, the literature has constantly cautioned against including migratory cases as cases of true cryptorchidism. Other observers have reported permanent descent in from 19 to 45 per cent of their cases.[1,4,12,14,15,16]

*Operative Results.*—Such results would appear to indicate that operation will be necessary in the majority of cases if a good scrotal position is to be obtained, and I believe this to be the case. In one series of seven patients treated surgically after failure of A.P.L. all showed anatomical reasons for the failure.[14] Operation was necessary in 75 per cent of Thompson's cases.[16] I should like to emphasize again, however, that the use of A.P.L. pre-operatively is valuable as an aid in the selection of cases for surgery and as a means of enlarging the structures to be found at operation.

The results to be obtained by operation appear to have been inadequately evaluated. McKenna[10] was unable to examine his cases postoperatively to prove the presence of sperm. Schuck operated on ninety-seven of 200 and noted that the growth of the operated organ was not improved.[13] Wangensteen[17] called attention to the fact that operation was incapable of completely restoring the germinal epithelium to normal function. Such restoration is possible in the experimental animal whose testes are returned to a normal scrotal position after having been temporarily resident in the abdomen; but this appears not to follow in the human being.

*Endocrine Therapy.*—In this connection I should like to call attention to the fact that the use of A.P.L. postoperatively is frequently recommended to improve the growth of the structures which have been restored to the normal scrotal position. However, I have never seen enlargement and have not been convinced by reports in the literature that the size of the testicle itself is ever influenced significantly by the administration of anterior pituitary-like hormones. If you recall that the action of anterior pituitary-like substance is almost wholly luteinizing in the female and interstitial cell stimulating in the male, it becomes manifest that the prime results to be obtained upon exhibition of this substance in the male is the elaboration of testosterone and the consequent development of the evidences of testicular hormone effect such as the growth of body hair, the change of voice, enlargement of the prostate, enlargement of the seminal vesicles, et cetera.

I have every reason to believe that testicles are capable of developing an interstitial cell mass without at the same time development of seminiferous tubules. It has been my good fortune to study the case of a young man because of his sterile union who showed every evidence of good masculine development except for the presence of two pea-sized testicles in a mid-scrotal position. The semen was somewhat deficient in quantity, measuring about 2 c.c. and not a single sperm was visible in the specimen.

## Recommendations

I should like to make a recommendation based on known physiological principles. I should like to recommend that the follicle-stimulating hormone as it is today available extracted from pregnant mares' serum* be used in cases of cryptorchidism postoperatively with or without the concomitant use of A.P.L. The so-called follicle-stimulating hormone when exhibited in the male is known to exert its effect on the seminiferous tubules and the germinal epithelium. I have no experience with this type of postoperative treatment, having only discovered a suitable case within the last few days, but I feel obligated to call the theoretical considerations to your attention inasmuch as the maintenance and restoration of fertility are the prime objects of the treatment of cryptorchidism rather than simply to obtain a cosmetic effect.

## Summary

The causes of cryptorchidism are not completely elucidated.

Most cases appear to depend on anomalous conditions of the peritoneum covering the spermatic vessels and vas and the appearance of fascial bands obstructing complete descent.

**Hormone treatment should be tried during the first years of puberty (nine to fourteen years) as a means of differentiating cases with mechanical obstruction, as an aid to surgery and to effect descent in about 20 per cent of the cases.**

*The dose is unknown but might well be 10 units twice weekly over a prolonged period.

A.P.L. should be used in doses sufficient to induce pubertal changes such as hair and genital growth which will require doses up to 1000 to 1500 R.U. weekly for an average of two months.

If operation is done, it should be done within the same age limits and should be followed by hormonal treatment to insure the restoration of the germinal epithelium without which any treatment is to be considered a failure.

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Michigan has been making big strides in developing its maternal and child health program, according to the latest reports to the Children's Bureau.

Commenting on the census figures, the Bureau states Michigan's maternal death rate declined from fifty-two in 1936 to thirty-six in 1937. In 1938 the rate was thirty-seven, but the one point increase was not sufficient to be statistically significant in view of the number of births involved, the Bureau points out. Michigan's 1938 rate was also held by three other states—Indiana, New Jersey, and Vermont.

Michigan's infant mortality rate in 1938 was forty-five per 1,000 live births, a drop of three points compared with 1937. One other state, Idaho, had the same rate as Michigan, while seventeen states had lower rates. The lowest state rate—thirty-six per 1,000 live births—was established by Connecticut and Nebraska.

There are still too many avoidable deaths of mothers and young babies in the United States, according to the Children's Bureau. Although the maternal and infant mortality rates for the United States in 1938 were the lowest on record, it is estimated that at least one out of two maternal deaths, and one out of three deaths of young babies can be prevented.

# Congenital Umbilical Hernia
## With Eventration


By Harry M. Nelson, M.D.
and
T. S. Fandrich, M.D.

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■ The number of cases of congenital umbilical hernia with eventration reported in the literature are few enough to make each case interesting. Most of the case reports are found in the foreign literature,[1,8,9,10,12,15] only a few being in our own.

The case we are reporting is as follows:

Mrs. C. R., aged twenty-eight, para II. Last menstrual period September 2, 1937, making estimated date of confinement June 9, 1938. Previous pregnancy March 25, 1936, at which time a normal 8 lb. 3 oz. full term female was born. No complications or postpartum morbidity were present.

Patient gave a normal menstrual history. Onset age 12, 28/7 type. Childhood diseases consisted of pertussis, measles and mumps. No operations except tonsillectomy and adenoidectomy.

This pregnancy was uneventful except for nausea and vomiting during week before admission to hospital. Onset of labor was exactly two weeks before expected date. The patient entered the hospital in labor and delivered 4 hours and 12 minutes after onset. Blood pressure on admission 90/50, pulse 96, temperature 98.8. Fetal heart was 140 on admission and rose to 158 one hour later. No analgesics or sedatives were given patient during labor.

The baby was a 6-pound 4-ounce female, born spontaneously after a midline episiotomy. It cried vigorously and required no resuscitation of any kind.

At the time of birth it was noted that approximately 14 inches of the ileum, cecum and ascending colon were lying free, outside of the abdomen. There was no sign of a hernial sac. The opening in the abdominal wall was fully the size of a half dollar, and the umbilical cord was attached to the left of this opening. As soon as the baby was born, the intestines were wrapped in warm saline sponges and within twenty minutes the infant was taken to the operating room. By this time, practically all of the intestines were outside of the

abdominal cavity. This was thought due to the release of intrauterine pressure.

Under drop ether anesthesia, the opening of the abdominal cavity was extended above and below, and after considerable difficulty, all of the intestines were

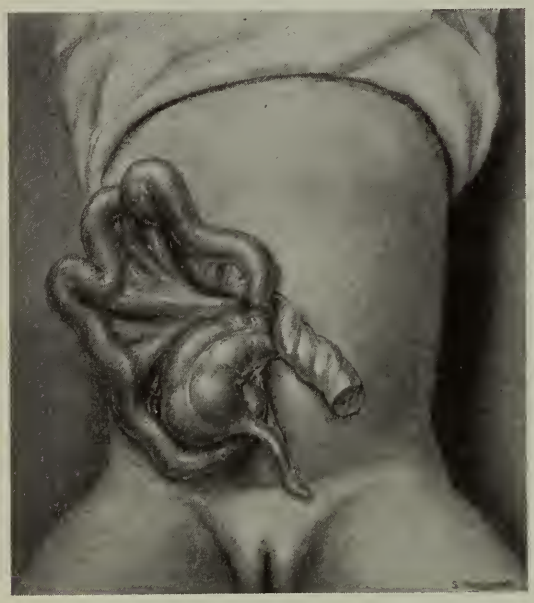

Fig. 1. Drawing of baby as it appeared immediately after birth, showing the umbilical cord to the left lateral side of the opening; the cecum, appendix and small intestine.

placed back in the abdominal cavity. Through and through silk sutures were used to close the abdominal opening, after having excised the umbilical cord.

The baby lost weight during its first three days, going down to 5 pounds 11 ounces. At the time of its discharge, on the twenty-fifth day, it weighed 6 pounds 12 ounces. The only abnormality in an uneventful convalescence was daily partial regurgitation of formula and some vomiting, which had entirely disappeared by the twelfth day. The baby was discharged on the twenty-fifth postpartum day and has been in perfect health since. At the present time (November 21, 1939), the child is normal and active, weighing thirty-two pounds and twenty-three inches tall.

It is obvious that this congenital defect is rare, when it is estimated that it occurs only once in 5,000 deliveries.[5]

## Embryological Factors

Stein and Gerber[13] stated some of the embryological factors related to this subject as follows: The primitive gut and ventral body wall are formed primarily by a ventral bending and fusing of the originally flat germ layers which rest upon the yolk sac.

On each side, the splanchnopleure first curves ventrally and fuses with the member of the opposite side in the mid line, to form the gut. Shortly thereafter, the somatopleure fuses in the same manner in the ventral medial line to form the body wall. It is apparent that a defective fusion of the two sides of the somatopleure would result in a more or less extensive medial cleft. The cleft may extend from neck to pelvis, associated with a stillbirth, or may be limited to a small portion of thorax or abdomen.

Further factors, given by other writers,[3,4,6,11] are listed as: Traction on the umbilical cord; undue pressure in the abdominal region because of faulty fetal position; inhibition of growth of the abdominal wall; a disturbed relationship between growth of the abdominal cavity and its contents; and accidental bands of adhesions. There is no evidence of familial tendency in this defect of development.

## Summary

1. Report of a case, interesting because of uneventful convalescence, probably because of early surgery.

2. Presentation of a few points in embryological development of this area, with a few etiological possibilities, as mentioned by other authors.

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Michigan has added to its maternal and child health staff a consultant in pediatrics to work in organized territory through the local health departments in developing this pediatric consultant service. He is to act as consultant to local practitioners in pediatrics in rural areas and wherever such consultant service is not otherwise available. He also lectures to county and district medical societies on the practice of pediatrics, talks to lay groups on the care of children, and participates in the state program of postgraduate education through lectures in organized centers. He has recently completed a comprehensive study of all infant deaths in the year 1939 in the city of Flint.

# Feminine Psychology

## With Emphasis on the Gynecological and Obstetrical Phases

By Louis Adrian Schwartz, M.D.
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■ The history of medicine is filled with recorded observations indicating that there are definite connections between psychological and physiological processes. Dr. Franz Alexander[1] has pointed out, in his "Medical Value of Psychoanalysis," that these connections were perceived almost intuitively from general observation in the prescientific and prelaboratory period," when the physician "laid a much greater stress on the psychological state of the patient and attempted to explain disease not only as a consequence of pathological changes in the different organs but as a consequence of the conditions of the patient's life"; that, with the growth of scientific research and detailed empirical observations, the introduction of psychological factors was naturally "resisted by the biologically orientated physician, who was reminded of those days, not long past, when medicine was a branch of sorcery and therapy a form of exorcism," and that "the invasion of medicine by psychology is felt by the majority to introduce an unknown factor, incapable of tangible and scientific definition and approach."

### Somatic Effects of Psychogenic Disturbances

There has been abundant supportive evidence showing that psychogenic disturbances of the organs of the body, the functions of which are regulated by the autonomic nervous system, can result in definite anatomical and structural changes. The connection of the cortex with the visceral organs through the sympathetic and parasympathetic system is sufficiently well known, and this connection implies that essentially every peripheral physiological process, in whatever part of the body it takes place, can potentially be influenced by psychological factors. There is a complicated interrelation between the autonomic ganglia and the central nervous system, and all visceral organs receive nerve fibers both from central origin and from sympathetic ganglia which lie outside of the central nervous system. Therefore, the concept of the autonomic nervous system is much more functional than anatomical, because morphologically they are closely interrelated and the innervation of the inner organs is always mixed.

**The sexual functions, in the broad sense, probably represent the most instinctive phenomena of organic life and, in the life of women, this function holds a most important place, for upon it depends the phenomenon of maternity. It is certain that, until recently, as far as woman is concerned, any education which touched upon her sexual life was essentially a denial of the instinctual basis for sex, and that many of the sexual disturbances which have spoiled the lives of more than one woman could have been avoided by rational education.**

As Dr. Karl Menninger[4] has pointed out, the starting point for many gynecological manifestations on a functional basis is often to be found in slight, quasi-physiological disturbances. Sometimes it is a woman's great anxiety for maternity which leads her to consult a gynecologist, or sometimes it is a sexual manifestation which may form the starting point of errors of interpretation, thereby turning the woman's mind towards the idea of some real affection of her genital apparatus.

### Relation to Inhibition

Research studies as to the psychological determinants of somatic symptomatology have made it quite apparent that many symptoms can frequently be explained by the assumption of psychological inhibition. In other words, a degenitalization of the genitals, as it were, can take place. Naturally, long-continued frigidity or vaginismus could not exist without some corresponding structural changes, or at least atrophy, of the tissues and glands, which is characteristic of any unused

part of the body. That the emotional life has some relationship to frigidity would appear to be demonstrated by numerous reported cases in which a reorganization of the psychic life results in pregnancies ten to twenty years after marriage.[3] Some gynecologists have gone so far as to postulate details of the physiological mechanisms of this phenomenon. Sellheim, in 1925, assumed that the emotional factors are reflected in an over-action of the ovaries, resulting in premature maturation of the follicles, so that ova are discharged which are not yet ready for fertilization. He believed that, in some cases, this could be cured by psychotherapy, in others by a gradual reconciliation of the woman to her sterility, and that this reconciliation served to decrease the pathological emotional stimulation of the ovary and hence allowed it to discharge normal ova, thereby terminating the sterility. In this connection, the conclusions of Benedek and Rubenstein[2] (based on independent observations which were then correlated simultaneously) are of interest:

1. The day-by-day study of vaginal smears and basal body temperatures provided a useful and enlightening method for analysis of gonad function of adult woman.
2. The psychoanalytic method could also be employed for a day-by-day study of the cycle of propagative function on the psychological level.
3. The simultaneous use of the two methods provided clear correlations between the physiological and psychological processes.
4. The investigation suggests that in the adult woman, it was possible to relate instinctual drives to specific hormone functions of the ovaries.
5. Whenever the metabolic gradient, correlated with the specific gonadal hormones, changes its direction or slope, the psychological material shows a change in the direction of the instinctual drive.

This was the first time that an accurate method has been provided, affording an approach to a study of the biological foundations of the instincts.

*Frigidity.*—To go back to the theme of frigidity, some women vomit after every act of coitus. Many patients stop vomiting during pregnancy when, by suggestion, after an anesthetic, they are merely told that the pregnancy has been terminated. There are innumerable devices used by patients to bring about self-punishment or to reject the pregnancy by vomiting, or to develop other sudden, inexplicable, severe symptoms. To be pregnant is a great psychic trauma to some women, and many difficulties developing coincidentally are, in essence, protestations and the wish to reject the child.

*Pseudo Pregnancy.*—There is also the so-called nervous or phantom pregnancy—pseudocyesis. Some women are haunted by the idea of maternity because they either so greatly desire it or fear it, and a curious group of phenomena can be developed, simulating pregnancy, with the exception of uterine gravidity, even to its very last symptom.

*Menstrual Disturbances.*—Coming to the uterus itself in its non-gravid form and functions, we think, first, of all those disturbances of menstruation which have been traced to a direct connection with the unconscious repudiation of femininity. Of these, amenorrhea is the most logical and dysmenorrhea probably the most frequent. But not infrequently, menorrhagia, metrorrhagia and even leukorrhea have also been identified as psychologically predetermined, and by removal or correction of the psychopathology, amelioration of the symptom becomes easier. The rejection of the female rôle, which is dependent on deep-lying hostility, is directed outwardly against men and inwardly against the feminine part of themselves by reason of which some women feel so inferior. There also arises a sense of guilt which is focused upon that part of the body where a repudiation of femininity has been made concrete. There is a wide variety of phenomena, ranging from behavior reactions through functional aberrations to actual structural changes. All of them may be visualized as representations in different spheres of a profoundly influential drive, the subjective aspect of which is a wish to repudiate femininity; that this may appear in the form of perverted symptoms has been known in some degree since the hysterical syndrome was first recognized. Recent studies in the endocrines have shown the presence of the products of the glands of internal secretion of the opposite sex, in varying degrees, in each individual.

**Psychological studies have also clearly established, in some cases, the unconscious wish of the little girl to be a boy, based on the physical and social advantages accruing to the male sex, and this unconscious wish to repudi-**

**ate her femininity has been found to have been exaggerated later by the shock of the first menstruation, by defloration, or fear of childbirth. That the functional aberration which we call hysteria may become structuralized into various organic changes is at least a logical hypothesis, but it is not yet proved.**

It can be agreed certainly that any symptom may be psychogenic, chemogenic or physiogenic, and that any disease may be considered as a combination of all three, but none can represent any one of these factors alone. We attempt to interpret the psychological aspect of these conditions with the physics and chemistry with which we are more familiar.

### Puerperal Psychoses

In the past it has been common to describe certain psychoses occurring at physiological epochs and to give them the name of the epoch during which they occurred, e.g., the "puerperal psychoses" and the "lactational psychoses." Infection and exhaustion are frequent causes operating at such periods to produce mental disturbances. A large number of these psychoses are, in reality of the infection-exhaustion type. Psychogenic factors are also of prime importance. A depression during pregnancy may mean that the wife is not in love with her husband and, therefore, does not want his child. It will be understood, however, that the strains incident to pregnancy, parturition, the puerperium and lactation may produce outbreaks of various psychoses, particularly dementia precox. There is no such thing as a "puerperal psychosis" strictly speaking. Mental disorder frequently occurs during the puerperium but must be classified in accordance with the symptoms it presents rather than the time of onset. A patient may be too immature to withstand the responsibility of motherhood. Patients who have had a history of a psychotic episode at parturition should be advised not to have further children, especially where there is a clear-cut psychotic episode with regressive symptoms, and where there is no evidence to show that the condition is primarily a toxic or infectious one. A history of fever with delirium, or evidence of renal damage or circulatory failure usually rule out the toxic, infectious cases. We have had occasion to see patients who have been advised by physicians to marry and have a child as a therapeutic measure to get over a previous nervous breakdown. We feel that this is unwise advice as, by superimposing added emotional strains upon an already overburdened personality, one may precipitate a more lasting mental condition.

### Climacteric Changes

Among the most common and intractable psychological problems with which the gynecologist must deal are the involutional depressions or the beginning melancholia at the climacteric period.

**In general, these conditions are found in a rather characteristic type of woman. Usually, these women have been somewhat indulged or pampered, have loved the idea of being loved, have found narcissistic satisfaction in being wanted, and have basked in the affection bestowed upon them rather than in the fact that they gave in love. This is true in general but not necessarily so in every case. When such women approach the menopause, they resent the physical changes in their appearance, feel they are not loved or wanted, develop ideas that their husbands are unfaithful because they are no longer as attractive as formerly, or develop ideas of unworthiness and self-accusation.**

In many such cases, removal from the home and placement in a sanitarium becomes a necessity. A new environment with new associations and different interests can be utilized. Theelin, particularly in larger doses, has been found to be of great value. The families of such patients should be advised to be more tolerant, patient and encouraging, and every effort should be made to safeguard the patient's ego. A feeling of "belonging," of making a contribution to family life, is an important psychological device in improving the mental attitude of such patients. This is a psychological epoch in the life history of a woman and should be dealt with sympathetically by her family and in a patient, understanding way by the physician.

### Summary

In summary, the problem of feminine psychology cannot be related to factors inherent, namely, the anatomical, physiological, psychic characteristics of women alone, but also must be consid-

ered as importantly conditioned by the culture complex or social organization and the individual psychology, through the experience of the woman herself in terms of her early relationships and training.

**Some of the theories advanced may sound fantastic, but it is suggested that they may be only foreign to our usual thinking. If one wishes to have more than a mere emotional judgment, there is only one way scientifically valid—a testing of the facts.**

Repeated observations, case material, contrasting attitudes on the part of the individuals from the social, economic and cultural standpoints, show the universality of these dynamic factors which have been described. Such scientific observations as to the frequency of the types described give the social factors relatively slight value, while difficulties in personal development, when repeated as traumatic events and as disturbed relationships, can be seen as more significant. Such emotional conflicts, which are accompanied by their physical counterparts, can best be dealt with by the understanding physician when the symptoms first present themselves.

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### "IF THIS BE TREASON . . ."

Is the American Medical Association a trust? Yes, it is—a sacred "trust." From its very beginning the A.M.A. has considered the health of the American people above all else. It led the fight against diploma mills, and through its efforts medical education was placed on its present high plane. The A.M.A. was instrumental in raising the standards of hospitals so that today American hospitals are the finest in the world. It has striven continuously to give the American people the best quality of medical care that the people of any great nation enjoy. But, because it does not fall in line with all the schemes proposed for the distribution of medical care, the A.M.A. must now be purged.

We say, in the words of Patrick Henry, "If this be treason, make the most of it!"—*Milwaukee Medical Times,* reprinted in *Illinois Medical Journal,* January, 1941.

# Clinico-Pathological Conference

**Detroit Receiving Hospital**

**Thursday, December 5, 1940**

S. T., a colored man, forty-six years of age, was admitted to the hospital on June 5, complaining of shortness of breath and swelling of the ankles of three weeks' duration, and hiccoughing of two weeks' duration.

*Present Illness.*—The patient had felt as well as ever (including a completely normal exercise tolerance) until November of the preceding year, when he started to notice generalized weakness and mild pains in his knees without swelling or appreciable disability. During the winter he had several episodes of pain in his finger tips which he attributed to frost-bite. About three weeks before admission his fatigue increased and he became short of breath upon even mild exertion. There was slight intermittent painless swelling of the ankles which usually came on in the evening and disappeared by the following morning. He went to a private physician who took a blood test and told him his blood was "bad." He then gave the patient three intravenous injections of a yellow medicine. About two weeks prior to admission he started to hiccough and continued to do so.

*Past History.*—General health good. Malaria in 1912. Penile lesion at age of 17. Received no treatment until 1930 (age 36) when he was given an indeterminate number of hip and arm injections. He had had occasional treatments since. No history of rheumatic fever. No previous severe illnesses or hospitalization.

*Occupational History*: Odd jobs.

*Family History and Marital History*: Not of contributory value.

*Physical Examination* revealed a poorly nourished though well-developed colored male lying flat in bed and hiccoughing. Height 5'8", weight 119 pounds. Temperature 99.8°, pulse 114, respirations 25. Eyes: pupils were equal and regular, reacting normally to light and upon accommodation. The ocular fundi showed normal vessels and disks. There were no hemorrhages or exudates. No icterus of the scleræ. No petechiæ. Ears and nose: negative. Mouth: mucous membranes were pale but not otherwise remarkable. Neck: no venous engorgement but marked carotid artery pulsation. Trachea in midline. No tracheal tug. No cervical or other lymphadenopathy. Lungs: normal resonance. Medium crepitant râles at bases. Heart: apical impulse palpable in the fifth interspace in the mid-clavicular line. Systolic thrill in first right interspace in parasternal line on deep expiration. No increase in supra-cardiac dulness. Rough blowing systolic murmur in the aortic area with a soft diastolic murmur heard also in aortic area and transmitted downward along the left border of the sternum and to the apex. At the apex the first heart sound was slapping in quality. Also at the apex there was a blowing systolic murmur, and a rumbling murmur which persisted throughout diastole without definite presystolic accentuation. Regular rhythm. Blood pressure: right arm 120/50; left arm 115/40, abdomen: liver and spleen not palpable. No masses or tenderness. No ascites. Extremities: collapsing radial pulse; normal reflexes. No edema. No clubbing. Rectum and genitalia: negative.

*Laboratory Studies on Admission.*—Urinalysis: specific gravity 1.016, sugar 0, albumin 0, sediment negative. Blood: Hemoglobin 9.0 grams, RBC 2.98, index 0.9 WBC 4.000, neutrophiles 80 per cent, eosinophiles 2 per cent, lymphocytes 18 per cent, icterus index 5.5,

blood urea 33 mg per cent. Kline and Kahn positive. Subsequent laboratory tests: 6/22—hemoglobin 9.0 grams. RBC 3.69, WBC 17,450, neutrophiles 88 per cent, lymphocytes 12 per cent. Blood sulfathiazole levels: 7/5—2.5 mg per cent; 7/8—5 mg per cent; 7/11—3.6 mg per cent; 7/15—2.9 mg per cent; 7/18—2.6 mg. per cent. Numerous urinalyses showed variations in specific gravity between 1.005 and 1.020, occasional slight traces of albumin. The sediments were almost always negative except for a few to 25 white blood cells on three or four occasions. X-rays and electrocardiograms to be reported.

*Clinical Course.*—During his hospital stay the patient ran a swinging type of temperature varying between 99 and 103 degrees. Sulfathiazole therapy was started on July 3, and there was a drop of the temperature to normal starting on July 4, and persisting to July 10. In spite of continuance of sulfathiazole therapy, the patient developed fever again ranging between normal and 102°. Sulfathiazole therapy was stopped on the twenty-first for a period of five days, and the fever persisted. The pulse rate was consistently elevated ranging between 80 and 130. During the period of normal temperature the average pulse rate decreased to about 100 and then subsequently became more rapid again. The respirations varied between 20 and 25 with occasional rises to 30 and a terminal rise to 45. The patient's hiccoughs disappeared and then recurred on several occasions without being very troublesome. He gradually lost weight, became generally weaker and expired on July 28 without developing signs or symptoms of localizing value.

*Dr. Edward D. Spalding.*—This is an interesting case because while in a good many respects the history and physical findings are quite straightforward and point in one direction there are one or two aspects which will bear considerable discussion. The history of this patient's illness does not contribute nearly as much as do the physical findings and laboratory data and so I shall comment upon it only briefly. The fact that he was perfectly well until seven months preceding his hospital admission should be kept in mind as being some evidence against a diagnosis of chronic rheumatic heart disease. The episodes of pain in his finger tips which the patient attributed to frost-bite are, in view of the other findings, very suggestive of the lodging of emboli in the fingertips which is commonly seen in bacterial endocarditis. I do not feel that the hiccoughing is of any diagnostic significance in this situation. In regard to the past history, the attack of malaria does not impress me as being connected in any way with his present illness. The inadequacy of the anti-syphilitic treatment greatly favors the possibility that a patient who has syphilis will develop cardiovascular involvement and is a point in favor of this as the basis for this patient's heart disease. The absence of a history of rheumatic fever is not of much significance since many patients with rheumatic heart disease lack such a history. In the physical examination the absence of petechiæ is noteworthy. The history of the episodes of pain in his finger tips may be equivalent in importance and thus counterbalance the former. The absence of a tracheal tug is also significant but again its presence would be much more significant since it is always pathognomonic of an aneurysm of the aortic arch. Unfortunately, it is frequently absent in aneurysms of the aorta in general and also in some aneurysms of the aortic arch. The lack of engorgement of the cervical veins and the normal area of supracardiac dulness are further evidence against the presence of an aortic aneurysm, although the roentgenogram not infrequently shows an aneurysm when there are no physical signs to indicate its presence. The presence of the rough systolic murmur in the aortic area and the thrill in the first right interspace bring up the possibility of either a rheumatic or arteriosclerotic aortic stenosis or a roughening of the aortic valve due to the presence of bacterial vegetations. The lack of presystolic accentuation of the apical diastolic murmur in the presence of a regular rhythm is against the causation of this murmur by a rheumatic mitral stenosis.

**Therefore, we are probably dealing with syphilitic aortic insufficiency and this finding at the apex is probably an Austin-Flint murmur. I have a good definition for two of these atypical cardiac murmurs which so frequently lead to confusion. The Austin-Flint murmur may be defined as a diastolic murmur at the apex of the heart occurring in an admitted case of aortic insufficiency that leads one to suppose that there may be a mitral stenosis; and in the same way a Graham-Steele murmur may be defined as a diastolic murmur at the base of the heart in an admitted case of mitral stenosis that leads one to suppose that there may be an aortic insufficiency.**

From the cardiac findings, therefore, we can well explain the entire picture of a diagnosis of syphilitic disease at the aortic orifice without postulating involvement of the mitral valve. However, I cannot definitely exclude the possibility of rheumatic aortic stenosis.

One of the significant laboratory findings is the absence of red blood cells in the urine. Again this negative finding should not be given too much weight. I doubt whether the electrocardiograms will be particularly help-

ful in this case. From considerable experience in Clinico-pathological Conferences, one can make several inferences from some of the laboratory data which are present and from some of the laboratory data which are absent. The sulfathiazole levels combined with the clinical picture indicate to me that this man almost certainly had bacterial endocarditis since I can think of no other reason for which sulfathiazole would have been given. The mention of blood cultures has undoubtedly been purposely omitted.

**In considering the course of this patient in the hospital, the fall in temperature which occurred on the day after the administration of sulfathiazole was started, is probably significant, in spite of the fact that the fever recurred while sulfathiazole was still being given, although at a slightly lower level. While sulfathiazole usually temporarily sterilizes the blood stream, the organisms remain buried in the heart valves where they are not susceptible to attack from the drug. Therefore, while the fever and bacteremia may be controlled in part by the sulfathiazole most types of bacterial infections persist.**

I have recently seen a case with acute bacterial endocarditis in which the infecting organism was the micrococcus sicca, an unusual organism belonging to the group of gram negative diplococci such as, the gonococcus and meningococcus. This organism, like the others in its group, is apparently much more susceptible to the sulfonamide drugs and this patient was apparently cured although it is too soon to know whether this will be permanent. The organism in the present case is probably streptococcus viridans, a notoriously bad actor as far as response to treatment is concerned. In preferring the diagnosis of subacute bacterial endocarditis superimposed upon a syphilitic lesion of the aortic valve, I realize that there are considerable odds against this being the case since this complication is comparatively rarely seen. Chronic rheumatic heart disease with aortic stenosis and insufficiency, mitral stenosis and insufficiency and a superimposed subacute bacterial endocarditis must be mentioned as a very possible alternative diagnosis.

*Dr. Saul Rosenzweig.*—**I should like to emphasize the fact that this patient had a temperature of 99.8° on admission to the hospital. Usually patients with valvular heart disease exist on a lower pyrexial plane than other patients and, therefore, the presence of fever immediately arouses the suspicion of some complication.**

The x-rays may aid in the differential diagnosis of the cause of aortic insufficiency by showing a change in the left border of the heart indicative of enlargement of the left auricle when there is rheumatic heart disease with co-existing mitral stenosis. Also in such a case the electrocardiograms may show a tendency toward right axis deviation or heightened notched P waves which would not be seen in syphilitic aortic insufficiency. In this case I favor the diagnosis of subacute bacterial endocarditis with underlying chronic rheumatic heart disease with aortic stenosis and insufficiency and miteral stenosis and insufficiency for these reasons: (1) The accentuated first sound at the apex, (2) the loud aortic systolic murmur and thrill, and (3) the comparative rarity of syphilitic heart disease as the basis for bacterial endocarditis. In my opinion the absence of a presystolic accentuation of the diastolic apical murmurs is not inconsistent with the presence of mitral stenosis even though the cardiac rhythm is regular.

## Further Studies

(Presented following the clinical discussion)

*Fluoroscopic and roentgenographic examination* of the chest showed moderate congestion in both lung fields. The costophrenic sinuses were clear. The heart was normal in size, shape and position. The cardiac pulsations were of the rocking-beam type. There was some widening of the aorta.

The electrocardiogram showed a normal axis and normal sinus rhythm. The P waves were upright, of normal size and contour. The T waves were of low voltage in the three standard leads and of normal voltage in the precordial lead. Electrocardiographic interpretation: "Probable myocardial damage."

The blood cultures were repeatedly positive for streptococcus viridans and varied as indicated in the accompanied illustration.

## Résumé of the Pathological Findings

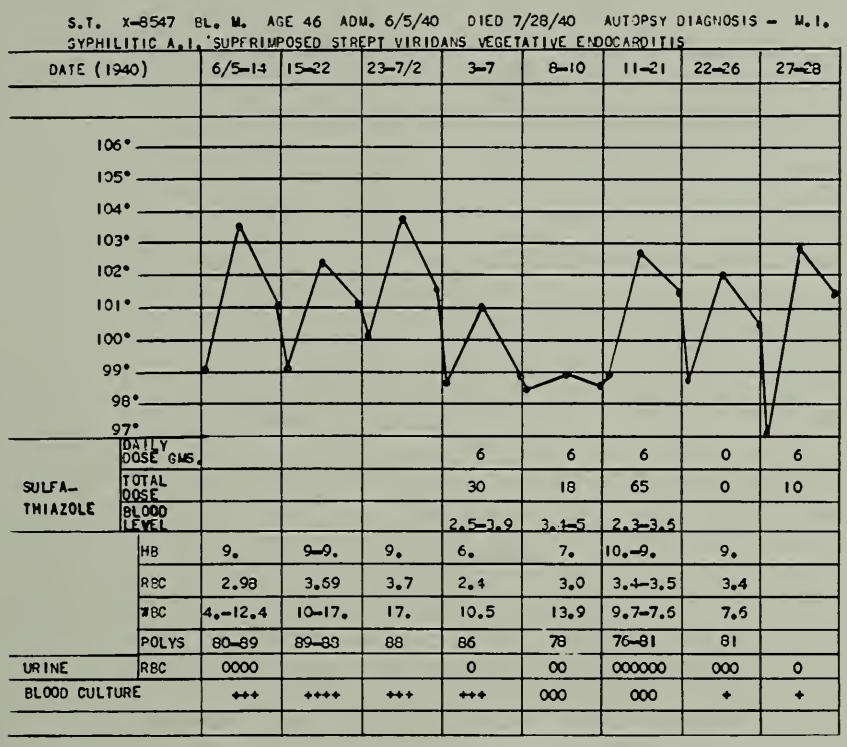
**Final Diagnosis:**

1. **Subacute bacterial endocarditis involving both mitral and aortic valves, chiefly the former, superimposed upon chronic rheumatic valvulitis.**
2. **Syphilitic aortitis and aortic valvulitis.**

The heart weighed 430 grams constituting Grade I cardiac hypertrophy. There was no pericarditis and mural thrombi were absent. There was widening of the commissures of the aortic valve and thickening of the aortic valve leaflets. The posterior leaflet was ulcerated and at this point there were attached small bacterial vegetations. The mitral valves were thick-

ened and fibrous and attached to the right cusp there was a large, soft, greenish-yellow vegetation. The circumference of the mitral valve was 11 cm. and that of the aortic, 7 cm. Microscopically there was nodular fibrosis of the mitral valve constituting evidence of preëxisting rheumatic infection. This was not satisfactorily demonstrated in sections of the aortic valve.

*Dr. Paul H. Noth.*—The response of this patient's disease to sulfathiazole therapy is illustrated in the accompanying figure. The temperature chart is a composite one for varying numbers of days as recorded on the topmost line.




Aortic insufficiency was due chiefly to syphilitic valvulitis and this was contributed to by the presence of bacterial vegetations. Autopsy cultures were positive for streptococcus mitior (viridans).

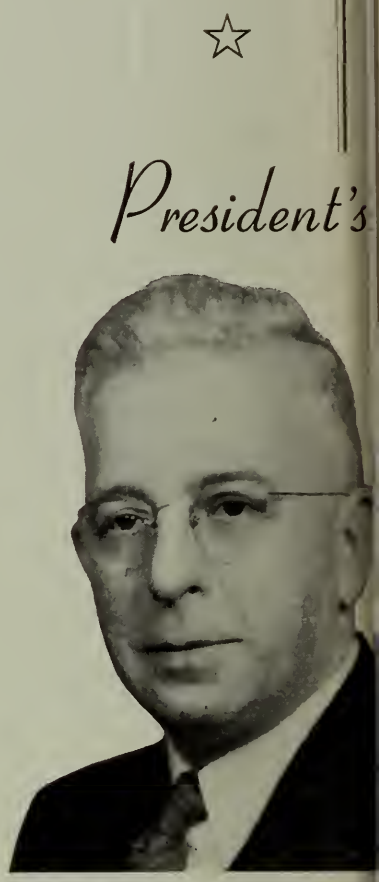
The left pleural cavity contained 800 c.c. and the right 500 c.c. of fluid, the specific gravity of which was 1.015. The right lung weighed 720 grams and the left 800 grams. Both lungs were diffusely dark and firm. Microscopically there was a typical picture of chronic pulmonary congestion, the outstanding features being the presence of large numbers of heart failure cells in the alveoli and thickening of the alveolar walls due to connective tissue hyperplasia.

The liver weighed 1770 grams. The cut surface was mottled yellow and red, the lobular definitions being abnormally conspicuous. In the liver sections there was a wide anemic zone about each central vein composed of atrophic pale-staining liver cells. The pallor of this zone was due to edema superimposed upon passive hyperemia, the edema fluid having collected between the sinusoidal endothelium and liver rods, producing terminal narrowing of the sinusoids.

Excluding congenital valve defects, it is apparent that subacute bacterial endocarditis is usually, if not always, superimposed upon preëxisting rheumatic valvulitis, even though the presence of rheumatic infection cannot always be demonstrated. The presence of subacute bacterial endocarditis involving the aortic valve apparently superimposed upon syphilitic aortic valvulitis should probably lead to the suspicion of associated rheumatic valvulitis even though the evidence of rheumatic infection is largely obliterated by the syphilitic lesion.

After sulfathiazole therapy was started the fever decreased and then disappeared with an accompanying sterilization of the blood stream. However, in spite of continued sulfathiazole administration the temperature rose. Temporary withdrawal of the drug to exclude the possibility of its producing the fever was followed by a return to positive of the blood cultures. The drop in hemoglobin and red blood cell count occurred before sulfathiazole was started and, therefore, was not caused by it. Four other patients suffering from subacute bacterial endocarditis due to streptococcus viridans have been treated at Receiving Hospital with sulfathiazole. Three of these patients received no benefit from the drug as indicated by the continuance of fever and positive blood cultures. The fever of one patient subsided and his blood culture became negative for slightly more than one month, after which the fever returned and the blood cultures became positive in spite of continued administration of the drug.

# Medical Rehabilitation of Rejected Draftees



President's Page

Rehabilitation of draftees with remedial defects—for industry and for the man—is the plan of the Michigan State Medical Society.

A study of the causes which have forced the Selective Service to reject young men for military work will first be made by the State Society. The reports the Society receives would indicate that medical care has been available to these youths but that most of the defects can be attributed to heredity or environment or in some instances to carelessness, disinterest and neglect. The State Society will investigate whether those in the relief, W.P.A. and depressed economic groups were given opportunities to obtain needed medical services.

After the study of causes has been completed, a program of rehabilitation will be outlined by the Michigan State Medical Society. This is planned primarily to aid the youth in having his remedial defects eliminated so that he may become more valuable to himself and to the community by usability in industry.

President, Michigan State Medical Society.

# EDITORIAL

## RELIEF FOR THE DOCTOR

■ Negotiations, which have been in a rather nebulous state for several years and have become a very practical issue for some months, have culminated in a most constructive economic advance for the physicians of Michigan.

Mr. William J. Burns, Executive Secretary of the Michigan State Medical Society, made the initial contacts and a committee of The Council with Mr. Burns has finally secured a voluntary agreement with the representatives of the insurance companies active in Michigan, which should be most welcome to every practitioner (See page 123). It should definitely be realized that the fullest coöperation was forthcoming from the representatives of the associations of insurance companies both from the "old line," and the "mutual" companies as well as the "independent" companies of Michigan. Their enthusiastic aid was most acceptable and appreciated.

**One of the headaches of the practice of medicine has been the fact that the attending physician to an automobile accident victim has too frequently been unable to collect for his services. The same situation also has been a vital problem for hospital management. Now there will be some relief from an unpleasant situation!**

The gist of the agreement is that the patient, who has been injured in an automobile accident and for whom an insurance company is to be financially responsible, will sign an agreement giving the insurance company the right to make separate checks covering charges for services to the hospital and physician. There should be but little difficulty in getting this assignment from the patient while the memory of the service rendered is still fresh in his mind. The one agreement will cover both the hospital and the physician. The insurance companies have promised to assist the physicians in every possible way in getting these signatures and in the subsequent legal procedures.

Of course, there are a great many of these accident cases (not covered by any insurance) which must still be cared for as charity but at least the physician will know that if an insurance company is liable for the care of his patient, the money for his services probably will not be used by the "grateful" patient to buy a new car or a fur coat instead of paying the bills for services which saved him from pain, suffering, or even from death.

In Wisconsin a similar agreement has been in existence for two years. In Massachusetts there is a separate agreement for the physicians and for the hospitals.

If this works out as satisfactorily in Michigan as it has in Wisconsin and Massachusetts, physicians of Michigan, as did The Council, may well applaud the work of this committee which completed this welcome agreement.

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## BACK TO THE SEVENTEENTH CENTURY BY ORDER OF THE SUPREME COURT

■ The Medical Practice Act under which we are operating says that anyone who wishes to practice "medicine, surgery and midwifery" must prove his qualifications and ability to safely perform these services.

In a recent decision, the Supreme Court of the State of Michigan has held that since the law does not say "and/or midwifery," one who practices midwifery alone is not legally required to qualify to perform this service and is under no supervision.

For some reason not known to the unjudicial mind this ruling does not apply to "surgery" even though the wording is the same. From a medical point of view it is impossible to intelligently divide these three parts.

Since the beginning of organized medicine in Michigan the medical profession has urged the utmost care in the supervision of qualifications to practice medicine, surgery and midwifery realizing that in order to continue with the prevention of maternal mortality this trinity must be indivisible. The knowledge of a belated lay interest in this search for the best care for the prospective mother makes this legal ruling seem to hark back to the dark days of the seventeenth century. Perhaps the newly gained social and po-

litical enthusiasm added to the pleas of our own profession may bring forth from the present legislature even more rigid supervision over the practice of medicine than exists at present.

L. Fernald Foster

Wm. Hyland

Wm. J. Burns

Roy Herbert Holmes

## COUNCIL ELECTIONS

■ At the annual meeting of The Council held January 11 and 12 at Dearborn, Michigan, Treasurer Wm. A. Hyland, M.D., Secretary L. Fernald Foster, M.D., and Editor Roy Herbert Holmes, M.D., were reëlected to their respective offices.

The annual reports of these officers are printed in the Annual Proceedings of the Council elsewhere in this issue and portray the extent of activity of the Michigan State Medical Society.

The Council also unanimously re-appointed Mr. William J. Burns as Executive Secretary for another year. Perhaps the most significant testimonial to his activity is the increase in membership of the society from thirty-five hundred to forty-five hundred during his five years as Executive Secretary for the Michigan State Medical Society.

## CORRECTION

In a letter commenting on the editorial, "Don't Nurse Your Babies," in The Journal for June, 1940, Doctor E. F. Daily, chief of the Maternal Health and Child Welfare Division of the Department of Labor, states that the Department of Labor does not have any supervision over the State Unemployment Compensation Commission. He says that the Social Security Commission sets minimum standards for the State Unemployment Commission.

**How an Attorney General Thinks We Should Practice**

# MICHIGAN HOSPITALS AND MEDICAL PAYMENTS

## (Accident Cases—Agreement of Insurance Companies, State Medical Society and Hospital Associations)

THE Michigan State Medical Society has conferred with hospital authorities and representatives of insurance companies to effect an agreement whereby hospitals and physicians may be more definitely assured of payment for their services to those individuals who are injured in accidents and who, because of their injuries, are indemnified by an insurance carrier.

Such an agreement has been reached. It has been carefully considered and incorporated in it are the best thoughts of those concerned.

*Every physician member of the Michigan State Medical Society and every hospital superintendent is urged to read with exceeding care the information which is contained hereafter, as it is only through a thorough understanding of the provisions contained in the agreement that it can be effectively used.*

The annual toll of those injured or killed as a result of automobile accidents has served to place an increased financial burden upon the hospital and the physician.

Seldom does the lay public appreciate the costs to the institutions and profession in the services rendered. Bandages, dressings, staff nurses, food, medicine, splints and the like are all items of expense.

There are 152 registered hospitals in this state. Their construction and equipment involve the investment of millions of dollars and their availability to a community is a matter of necessity. They serve a community purpose; they protect and promote the health and well-being of the people. Their charitable contributions are enormous but are so strained that imposition must be avoided wherever possible.

Inability to collect even for the initial outlay of materials constitutes a source of great financial strain and is becoming of such magnitude as to involve the welfare of the community served as well as of the people assisted. Insurance companies are willing and anxious to afford to the fullest measure possible that coöperation which will offer the maximum degree of relief to both professional groups and protection to the community at large.

It is appreciated that large numbers of such cases are indemnified in whole or in part from insurance protection. In countless numbers, however, the funds are dissipated by the patient, and the hospital and physician remain unpaid, despite the fact that the settlement was predicted, often in its entirety, upon the expenses incurred.

Insurance companies are appreciative of the problem. It is to their interest as financial concerns (and to the interests of their policyholders and claimants as well) to take all feasible steps to assist in the solution of that problem.

Prompt medical and hospital care is recognized as preventive of serious consequences in the greater number of cases. Early disposition of claims is conducive to the health and well-being of the patient, and is attainable through the prompt coöperation of patient, doctor and hospital.

Knowing that this problem existed, it was recognized that a satisfactory arrangement should

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*Medical endorsements are divided into two kinds: (a) includes only the guest in the automobile and not the named insured; (b) this type covers the named insured and the occupants. Both endorsements are sold only when a liability policy exists, and are endorsements to the general type of automobile liability policy sold. The medical endorsement covers expense for medical, surgical, dental, graduate nurse, hospital and ambulance services, and, in the event of death resulting from such injury, the reasonable funeral expense, all incurred within one year from the date of the accident.

be made for the payment of hospital and medical costs in those instances in which the injured party received remuneration from the insurance carrier.

It should be understood from the outset that this agreement is not a panacea for the physician's or hospital's financial problems in accident cases. It covers only those cases in which payment is to be made to the injured party by the insurance carrier, whether hospitalized or not, or where the insurance carriers, in accordance with their standard clause, pay expenses incurred by the insured for such immediate medical and surgical relief to others as shall be imperative at the time of the accident, or where indemnity is made under a medical endorsement.*

The Michigan Hospitals and Medical Payment Plan agreement has been approved by the American Mutual Alliance, the Association of Casualty and Surety Executives, a group of independent Michigan Insurance Carriers, the Michigan State Medical Society, and the Michigan Hospital Association.

There is established a conference committee to adjudicate disputes that may arise under its operation and to further coöperation to the end that if any hospital, physician or insurance company feels that it has a grievance, such grievance may be placed before it for mediation and arbitration.

The Committee is composed of one representative from the Michigan Hospital Association, one representative of the Michigan State Medical Society and two representatives of insurance companies.

The Conference Committee established under the agreement will elect a chairman and a permanent secretary. The secretary will receive any complaints from hospitals, physicians or insurance companies, in writing, and will place the complaints before the conference committee which has been established. The secretary will also act as a clearing house from which forms (1), (2) and (3) may be obtained. The cost of the forms in pads of 100 will be 50 cents. Cash must accompany all orders for blanks.

*The effective date of operation of the Michigan Hospitals and Medical Payments Plan is March 1, 1941.*

It is emphasized that the fundamental confidental relationship between the physician or hospital and patient shall be maintained under the agreement as it has in the past. Information relative to the injuries sustained by a patient as a result of an accident should be supplied to the insurance company only when the physician or hospital has on file the signed form which gives the hospital or physician the privilege to so inform the insurance company. Specifically the agreement provides "Insofar as possible the insurance company representatives will coöperate with the hospital and the physician in securing such orders."

As soon as the payment form (number one or two) has been signed by the patient, the original copy of this form should be sent to the insurance company, or companies, affected. Failure to obtain payment from the insurance company, due to the fact that it has no liability in the case, does not preclude the physician or hospital from obtaining payment from the patient. Likewise, if the settlement for the injuries is not sufficient to cover the hospital and medical care, the physician and hospital may obtain the unpaid balance direct from the patient.

The agreement which is made a part of this bulletin should be thoroughly discussed in hospital staff meetings and the procedure to be followed by the individual hospitals should be clearly understood. It is strongly recommended that the approval of the physician be obtained in all instances before the forms are mailed or given to the insurance companies by the hospital. Space has been provided on the forms for the signature of the attending physician.

The conference committee extends to all parties interested an invitation to place before the committee any suggestions, criticisms or complaints. If there is any question relative to the

operation of this plan, it may be submitted to the secretary of the conference committee.

The agreement, as approved by the Michigan Hospital Association, the Michigan State Medical Society, the American Mutual Alliance, the Association of Casualty and Surety Executives, and the independent group of Michigan companies, is printed in its entirety in the following paragraphs:

### Michigan Hospitals and Medical Payments Plan

Doctors and hospitals have in the past experienced difficulties in securing the payment of charges from patients who have collected damages from persons causing their injuries despite the fact that in such cases a part of the patient's financial recovery actually was based on hospital, medical, and surgical expense.

Those principles are therefore enunciated in an effort to protect in so far as possible the interests of hospitals, medical and allied professions, insurance companies, the community and general public:

1. Except as the patient or his lawful representative may otherwise direct, the fundamental confidential relationship between the physician or hospital and patient shall be maintained. It is recognized that in order properly to submit a claim not only the early details of the injuries suffered must be disclosed, but also the expense which the injured party has incurred. In event of lawsuit or settlement, disclosure of this information is unavoidable, but the election so to disclose is that of the injured patient, and is his to be exercised. Therefore when so authorized by the patient, the physician and hospital will supply to the interested insurance company or companies complete information concerning the injuries and prognosis.

2. The obligation incurred by the injured party for necessary medical, surgical and hospital care is one primarily owing to either the physician or hospital. Payments by the insurance company by way of indemnifying the patient therefor should be applied toward the liquidation of such obligation to the extent such funds are available, and to assist therein, the insurance companies will recognize orders on proper forms for reasonable charges upon such funds which ultimately may become payable to the patient or his personal representative. In so far as possible, the insurance company representatives will coöperate with the hospital and the physician in securing such orders. Where the payment is insufficient to afford satisfaction to all parties concerned, the insurance company will endeavor to pay physicians' and hospital bills on an equitable basis.

3. In order that the insurance companies may furnish the fullest coöperation (and for the hospital's or physician's own proper protection) the physician and hospital shall notify insurance companies promptly of any claim upon which an order has been or may be issued.

4. In event of settlement with a patient who refuses or has failed to sign an order, the insurance company will endeavor to carry out the principles set forth in paragraph two and when this cannot be done will notify the hospital and physician before settlement or if such advance notice is not possible, then as soon thereafter as can be done.

5. The company shall pay any expense incurred by the insured, in the event of bodily injury, for such immediate medical and surgical relief to others as shall be imperative at the time of accident.

6. A Conference Committee of four, consisting of two insurance company representatives, and two representing the medical and hospital interests will be created to mediate disputes and to further coöperation.

*N.B. Address orders for forms, inquiries, suggestions, or complaints for the attention of Conference Committee either to L. Fernald Foster, M.D., 2020 Olds Tower, Lansing, Michigan; or to Robert Greve, 1313 E. Ann Street, Ann Arbor, Michigan.*

Form 1

Order for Payment
**Medical, Surgical and Hospital Bill**

....., 19...

To: .....
(name of insurance company)

.....
(Address)

If and when any settlement is made by you on account of my claim against

.....
(name of person(s) causing injury)

arising out of injuries sustained by me on or about....., and in con-
(date)

sideration of my being received for treatment by

.....
(name of physician or hospital)

you are hereby directed to pay the full amount of my bills for treatment, services and care to

.....
(name of physician or hospital) (address)

I understand this order does not relieve me of my obligations to pay such bill if not paid by your company, or any balance due after payment by your company.

Witness: Signed: .....
(signature of injured person)

.....

.....
(address)

This form has been approved by the American Mutual Alliance, the Association of Casualty and Surety Executives, a group of Michigan Insurance Carriers, the Michigan Hospital Association, and the Michigan State Medical Society.

Form 2

Order for Payment
**Medical, Surgical and Hospital Bill**
**for Minor or Incompetent**

.....,19...

To: .....
(name of insurance company)

.....
(address)

If and when any settlement is made by you on account of claims against

.....
(name of person (s) causing injury)

arising out of injuries sustained by

.....
(name of minor or incompetent)

on or about ....., and in consideration of such party being received for
(date)

treatment by

.....
(name of physician or hospital)

you are hereby directed to pay the full amount of the bills for treatment, services and care to

.....
(name of physician or hospital)

.....
(address)

I understand this order does not relieve the undersigned of any obligation to pay such bill if not paid by your company, or any balance due after payment by your company.

.....
(father or guardian)

Witness:

.....
(mother)

This form has been approved by the American Mutual Alliance, the Association of Casualty and Surety Executives, a group of Michigan Insurance Carriers, the Michigan Hospital Association, and the Michigan State Medical Society.

Form 3

**Information Authorization**

.....,19...

To: .....
(name of physician or hospital)

.....
(address)

You are hereby authorized to give

.....
(name of insurance carrier)

insuring the person or persons against whom (I) (We) have a claim arising out of injuries sustained by

.....
(name of injured party)

(or by me) on or about ....., or any representative of such insurance company,
(date)

a complete report of injuries and disabilities arising therefrom, hospital record and any other requested information pertaining to such injuries and disabilities, and copies thereof, and to permit it to examine the original records in your presenceif they should desire so to do.

Witness:

.....
(patient, or if minor, signatures of father, and mother, or guardian)

Approved:

.....

.....

This form has been approved by the American Mutual Alliance, the Association of Casualty and Surety Executives, a group of Michigan Insurance Carriers, the Michigan Hospital Association, and the Michigan State Medical Society.

# MICHIGAN MEDICAL SERVICE

The steady growth of Michigan Medical Service during its first year of operation is but an indication of the continuous benefits possible for both subscribers and doctors. During this period, more than 7,500 patients will have been enabled to obtain needed medical services while more than 1,500 doctors will have received in excess of $240,000 for their services to these patients.

No one can yet measure the full effect of the medical service plan in making the services of doctors readily available or in preventing unremunerated services or bad debts for doctors. Certainly the prospects are most hopeful. Through Michigan Medical Service, the medical profession has an agency that can combat the medical economic problems which have beseiged doctors during the past ten years.

### Improvements from Experience

The experiences gained in the actual operation of Michigan Medical Service during the first year afford a real basis on which to build improvements for the future. Many committees representing the various fields of medical practice—committees of the Michigan Dermatological Association, the Michigan Branch of the American Urological Society, the Michigan Association of Roentgenologists, the Detroit Roentgen and Ray Society, the Detroit Ophthalmological Society, the Michigan Association of Obstetricians and Gynecologists, and the Michigan Pediatric Society—have been called on by the Medical Advisory Committee to give expert counsel in regard to prevailing medical practices and to formulate definite procedures under Michigan Medical Service.

It is only through such close professional supervision that the functions of the medical service plan can be satisfactory.

Again, each doctor of medicine who has rendered services for subscribers to Michigan Medical Service can make the most important contribution toward the successful administration of the medical service plan by sending his suggestions, comments, or criticisms to the Medical Advisory Committee of Michigan Medical Service, Washington Boulevard Building, Detroit. So long as the Medical Advisory Committee is notified of situations which can be improved, progress can be made.

**MICHIGAN MEDICAL SERVICE**
**REGISTRATION**
**HONOR ROLL**

(As of January 10, 1941)

100 Per Cent

Barry
Mason

90 to 99 Per Cent

Calhoun
Menominee
Monroe
Newaygo
Tuscola

80 to 89 Per Cent

Allegan
Bay-Arenac-Iosco-Gladwin
Chippewa-Mackinac
Clinton
Delta-Schoolcraft
Dickinson-Iron
Gogebic
Gratiot-Isabella-Clare
Hillsdale
Ingham
Kent
Lenawee
Mecosta-Osceola
Midland
Oceana
O.M.C.O.R.O.
Ontonagon
Ottawa
Saginaw
St. Joseph

75 to 79 Per Cent

Branch
Eaton
Houghton-Baraga-Keweenaw
Lapeer
Muskegon
Northern Michigan
Wexford-Kalkaska-Missaukee

### Know Your Michigan Medical Service

It is becoming more and more important for every doctor to know the full provisions of the Medical Service Plan and the Surgical Benefit Plan of Michigan Medical Service.

MEDICAL SERVICE PLAN: Patients who identify themselves as subscribers to the Medical Service Plan of Michigan Medical Service

will have a Michigan Medical Service Identification Card which carries the designating *Number 2,* indicating that the subscriber is entitled to *both medical and surgical services of doctors of medicine in the home and office as well as in the hospital*—including consultation services, x-ray, laboratory, and anesthesia services. Obstetrical services are not included until after the patient has completed twelve months of membership.

Under the Medical Service Plan, services necessary to establish a diagnosis *only* (no treatment) are provided for tuberculosis, venereal diseases, and mental disorders. For cancer and malignant growths, benefits can be provided only for the services necessary to establish a diagnosis and for the initial operative or radiologic treatment.

Medical Services for alcoholism, drug addiction, self-inflicted injuries, or for Workmen's Compensation cases are not benefits under Michigan Medical Service. Likewise, benefits can not be paid under Michigan Medical Service for drugs, materials, appliances or supplies. The patient is responsible for all services, drugs, appliances or supplies which are not provided for under Michigan Medical Service.

A recent liberalization of the Medical Service Plan is the inclusion of benefits for the surgical treatment of appendicitis and hernia whether or not the subscriber has had attacks previous to the date of his Certificate.

SURGICAL BENEFIT PLAN: Subscribers to the Surgical Benefit Plan may be identified by the designating *Number 3* on the Identification Card which indicates that the subscriber is entitled to surgical and x-ray services only when a bed patient in the hospital. Obstetrical care in the hospital after twelve months of membership is also provided.

The Surgical Benefit Plan is a low-cost, partial-service program and *provides only for surgical services when performed in the hospital.* Such services include the operative and cutting procedures for the treatment of diseases and injuries and for the treatment of fractures and dislocations. Strictly medical or diagnostic services in the hospital or surgical care in the home or office are not included as benefits under the Surgical Benefit Plan.

The x-ray benefits include diagnostic x-ray services not to exceed $15.00 during the subscription year for each person enrolled in the plan. Before benefits are payable for x-rays under the Surgical Benefit Plan, the subscriber must be a bed-patient in a hospital. However, as an extra benefit, payments will be made for diagnostic x-rays of a surgical condition taken in the office, if the patient has a surgical condition which immediately thereafter requires hospitalization.

### Initial and Monthly Reports

Be sure to send an Initial Service Report for each patient for whom benefits are to be paid by Michigan Medical Service. By completing this short form carefully, it is possible to verify that the patient is in good standing and eligible for services. The exact spelling of the subscriber's name and the certificate number should be copied from the subscriber's Identification Card or Certificate. Each blank in this form should be filled in with the proper information. If there is some reason why the subscriber is not entitled to benefits under Michigan Medical Service, a notice will be sent by return mail. Unless the doctor is so notified, he will know that the subscriber is eligible for benefits.

As soon as the services are completed, but in no event later than the end of each month, a Monthly Service Report should be sent to the Medical Advisory Board for payment. This report is an itemized statement of the services rendered and should include an indication of each service rendered in order that the proper payment can be authorized.

### Weekly Payments to Doctors

During the second year of operation, it will be the endeavor of the Medical Advisory Board to have payments made weekly to doctors. This will be possible if the doctor sends in his report promptly and gives in full the information requested. Delay in payment of Monthly Service Reports could be avoided if the doctor's office assistant would take the few minutes necessary to give all the pertinent information requested in the Monthly Service Report.

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**Michigan Medical Service opened its doors one year ago—February 1, 1940!**

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## MEDICAL PREPAREDNESS IN MICHIGAN

The enactment of the Selective Training and Service Law of 1940 called upon the medical profession of each state to make a very great contribution to national defense. The physicians were asked to voluntarily make all the physical examinations of men selected for military service under the law.

The preliminary work for this program was very nicely accomplished by the Michigan State Medical Society when it formed a committee on Medical Preparedness following the lead of the American Medical Society. Under the able and enthusiastic leadership of Burton R. Corbus, M.D., past president of the Michigan State Medical Society, the State Medical Preparedness Committee quickly completed the formation of a Medical Preparedness Committee in each County Society. This pioneer endeavor of the State Society proved of inestimable value later.

The next operation was to organize a medical department in Selective Service Headquarters for Michigan to inform, assist and supervise the doctors in executing the physical examination program. Using the facilities of the Michigan State Medical Society, the State Medical Preparedness Committee and the constituent County Committees, the State Board of Registration in Medicine and the Michigan State Health Department, this volunteer organization of Michigan physicians was perfected with very little difficulty. Approximately one quarter of the physicians of Michigan are devoting a portion of their time to Selective Service. Of a total of 984 doctors of medicine, 705 are serving as Examiners for 192 Local Boards, 260 members of 19 Medical Advisory Boards, and 19 physicians on the 19 Appeal Boards.

The fact that hundreds of Michigan physicians so willingly coöperated in the venture speaks well for the medical profession in Michigan. The medical program is one of the most important portions in the Selective Service System. It is apparent from the reaction of the profession in Michigan that the doctors intend to do their part with distinction.

Lt. Col. Harold A. Furlong, M.D.
State Medical Officer, Mich. Selective Service.

## REMISSION OF DUES OF MEMBERS IN SERVICE

The Council of the Michigan State Medical Society, upon authority of the House of Delegates, has ruled that active members of the Society with 1940 dues paid, who are serving their country away from home in the armed forces of the United States, will be relieved of paying 1941 dues, if recommended by the County Medical Society.

The Secretary of the County Medical Society shall fill out and return to the State Society, 2020 Olds Tower, Lansing, the following form for each of the members in his society whose membership is to be continued on the above basis. For the Secretary's convenience, a number of these forms will be sent to him by the State Society:

"This is to certify that....., a member of the
(name of member)
..... County Medical Society, was called into active service in the United States..... on ..... 19....,
(branch of service) (date)
and is now on duty at .....
(name of post and location)
and for that reason is entitled to remission of 1941 dues in the Michigan State Medical Society, in conformance with official action taken by The Council of the Michigan State Medical Society on November 10, 1940.

.....
(Name of Secretary) (County Medical Society)

The above does not apply to former members of the Michigan State Medical Society who were not members in good standing in 1940; but it does apply to physicians completing their medical education during 1940 or 1941 who are accepted as members of the county medical society during 1941 and who are inducted into active military service in 1941.

# MICHIGAN PROGRAM FOR GRADUATES IN MEDICINE

*Cooperating Agencies*

Michigan State Medical Society
University of Michigan Medical School
Wayne University College of Medicine
Michigan Department of Health

| Courses | Ann Arbor and Detroit | All Dates Inclusive |
|---|---|---|
| Allergy | | May 12-16 |
| Anatomy | | February 12-May 28 (Wednesdays) |
| Diseases of the Blood and Blood-forming Organs | | May 12, 13 and 14 |
| Diseases of the Cardiovascular System | | May 19-23 |
| Diseases of the Genito-Urinary Tract | | * ..... |
| Electrocardiographic Diagnosis | | * ..... |
| Gastroenterology | | April 28, 29 and 30 |
| Gynecology and Obstetrics | | * ..... |
| Laboratory Technic | | June 30-August 8 |
| Nutritional and Endocrine Problems | | March 3-6 |
| Ophthalmology and Otolaryngology | | April 17-23 |
| Pathology: Special Pathology of Neoplasms | | June 30-July 11 |
| Pathology of the Female Genito-Urinary Organs | | July 14-25 |
| Special Pathology of the Eye | | July 28-August 8 |
| Special Pathology of the Ear, Nose, and Throat | | August 11-22 |
| Pediatrics | | * ..... |
| Proctology | | * ..... |
| Roentgenology | | April 14-19 |
| Summer Session Courses | | June 30-August 8 and 22 |

**Extramural Postgraduate Course** March 24—April 18

Ann Arbor
Battle Creek-Kalamazoo
Flint
Grand Rapids
Lansing-Jackson
Mt. Clemens
Saginaw
Traverse City-Manistee-Cadillac-Petoskey

**For further information, address:**
Department of Postgraduate Medicine
1313 Ann Street
Ann Arbor, Michigan

*Dates to be announced later.

# YOU AND YOUR BUSINESS

## NATIONAL CONFERENCE ON MEDICAL SERVICE

The following five topics encompass most of the economic thinking of the medical leaders of the country:

Medical preparedness
Voluntary group medical care programs
Postgraduate plans of state medical societies
Medical legislative problems
Medical care for Social Security clients

These basic subjects will be presented in the form of symposia at the National Conference on Medical Service in Chicago on Sunday, February 16. The fifteenth annual meeting of the Conference will be held at the Palmer House. All Michigan physicians, particularly those who are interested in medical economics or in any one of this year's subjects, are cordially invited to attend the Conference. There are no dues or registration fees. The Conference marks an annual get-together of the best medical-economic minds of the country.

## MICHIGAN'S INTANGIBLE TAX

The following is a hypothetical example of a report on intangibles based on Michigan's new intangible tax law:

| | | |
|---|---|---|
| Unpaid accounts receivable (as of 9/30/40) | $10,000.00 | |
| Less unpaid accounts payable | 1,000.00 | |
| | | $ 9,000.00 |
| Bank deposits: Commercial Acct. | 1,000.00 | |
| Savings Acct. | 4,000.00 | |
| | $ 5,000.00 | |
| Less exemption | 3,000.00 | |
| | | 2,000.00 |
| Stocks and bonds (non-income producing) | | 5,000.00 |
| Amount taxable | | $16,000.00 |
| Tax at .001 (1/10 of 1 per cent assuming the above items are non-income producing) | | .001 |
| Amount of tax | | $16.00 |
| Less statutory exemption | | 7.00 |
| Intangible tax payable | | $9.00 |

If any of the above properties are income producing, the maximum tax on that portion of the property is .003 of the value.

Life insurance policies are not taxable. Moreover, if two people, such as husband and wife, own a bank account jointly, each is considered to own one-half of the account and each is entitled to an exemption of $3,000 (unless there is evidence to prove that the account is actually owned by one of the two persons).

For detailed information and a copy of the booklet on Michigan's Intangible Tax Law, write Joseph H. Creighton, Manager, Intangible Tax Division, State Tax Commission, Lansing.

## NOT A PRIVILEGED COMMUNICATION

"At a hearing in a personal injury case under the Workmen's Compensation Act, the plaintiff called a physician to explain the nature of his injury. The defendant thereupon called two physicians who had attended the plaintiff before the accident to show that the plaintiff's trouble was chronic and of long standing. The latter testimony was objected to by plaintiff's counsel as privileged. Held, that under the Michigan statute the calling of one doctor by the defendant waives his privilege as regards all who can testify regarding the condition in dispute." Lacount v. Van Platen-Fox Co., 243 Mich. 557, 220 N.W. 697 (1928).

## MSMS DUES NOT RAISED

Dues of the Michigan State Medical Society have not been raised but remain at $12.00 per annum. While the Council was authorized by the House of Delegates to levy an assessment of $5.00 per member to cover emergencies, financial matters were so well arranged during the past year that no direct assessment or increase in dues was required. Dues are now payable to secretaries of county medical societies. Include your county society dues with the $12.00 dues of your State Society.

**The State Society Convention**

**September 17, 18, 19, 1941**

**GRAND RAPIDS, MICHIGAN**

## FIRST SESSION

1. *Roll Call.*—The meeting was called to order by Chairman A. S. Brunk, M.D. in the Dearborn Inn, Dearborn, Michigan, 9:30 a.m., January 11, 1941. Those present were Drs. Brunk, Wm. E. Barstow, Otto O. Beck, Howard H. Cummings, T. E. DeGurse, Wilfrid Haughey, Roy Herbert Holmes, W. H. Huron, A. H. Miller, Vernor M. Moore, Ray S. Morrish, Roy C. Perkins, Philip A. Riley, E. F. Sladek, C. E. Umphrey; also President Paul R. Urmston, President-elect Henry R. Carstens; Secretary L. Fernald Foster, Treasurer Wm. A. Hyland, Executive Secretary Wm. J. Burns. Absent on account of illness: Drs. R. J. Hubbell and O. D. Stryker.

2. *Minutes.*—The minutes of the Executive Committee meetings, including December 19, 1940, were approved as published, on motion of Drs. DeGurse-Cummings. Carried unanimously.

3. *The Secretary's Annual Report* was read by Dr. Foster, as follows:

## SECRETARY'S ANNUAL REPORT—1940

I herewith submit the report of the Secretary for 1940

The year 1940 marked another year of sustained effort in the execution of the many activities of organized medicine in Michigan. The established projects were continued and new endeavors initiated by THE COUNCIL, its Executive Committee and the various committees of the Society.

### Membership

The total paid membership for 1940 was 4,478 (plus forty-three Emeritus and Honorary Members), with net dues of $46,174.02 accruing to the Society. The number of physicians with unpaid dues at the end of 1940 was sixty-three. The membership tabulation for the years of 1939 and 1940 showing net gains and losses, unpaid dues and deaths as follows:

| 1939 | 1940 | Gain | Unpaid | Deaths |
|---|---|---|---|---|
| 4,383 | 4,478 | 95 | 63 | 77 |

The present membership of 4,521, when compared with a potential membership of the eligible physicians in the State of 4,700, indicates that the saturation point is rapidly being approached and that future yearly increases in membership will be small.

MEMBERSHIP RECORD—1940

| | 1939 | 1940 | Loss | Gain | Unpaid | Deaths |
|---|---|---|---|---|---|---|
| Allegan | 23 | 24 | – | 1 | – | – |
| Alpena-Alcona-Presque Isle | 20 | 18 | 2 | – | – | – |
| Barry | 14 | 12 | 2 | – | – | – |
| Bay-Arenac-Iosco-Gladwin | 77 | 75 | 2 | – | 4 | – |
| Berrien | 68 | 64 | 4 | – | 2 | – |
| Branch | 24 | 23 | 1 | – | – | 1 |
| Calhoun | 117 | 120 | – | 3 | – | 3 |
| Cass | 13 | 14 | – | 1 | – | 2 |
| Chippewa-Mackinac | 23 | 23 | – | – | – | 1 |
| Clinton | 11 | 11 | – | – | – | – |
| Delta-Schoolcraft | 29 | 27 | 2 | – | – | – |
| Dickinson-Iron | 19 | 22 | – | 3 | – | – |
| Eaton | 28 | 32 | – | 4 | – | 2 |
| Genesee | 163 | 178 | – | 15 | 2 | 3 |
| Gogebic | 23 | 24 | – | 1 | – | – |
| Grand Traverse-Leelanau-Benzie | 42 | 41 | 1 | – | 1 | – |
| Gratiot-Isabella-Clare | 36 | 37 | – | 1 | 1 | 2 |
| Hillsdale | 27 | 26 | 1 | – | – | 1 |
| Houghton-Baraga-Keweenaw | 42 | 44 | – | 2 | – | – |
| Huron-Sanilac | 26 | 28 | – | 2 | – | – |
| Ingham | 141 | 143 | – | 2 | – | 3 |
| Ionia-Montcalm | 42 | 46 | – | 4 | 1 | 1 |
| Jackson | 93 | 94 | – | 1 | 1 | 2 |
| Kalamazoo | 118 | 115 | 3 | – | 3 | 1 |
| Kent | 234 | 244 | – | 10 | 6 | 6 |
| Lapeer | 16 | 15 | 1 | – | 1 | – |
| Lenawee | 44 | 43 | 1 | – | – | – |
| Livingston | 21 | 21 | – | – | – | 1 |
| Luce | 10 | 11 | – | 1 | – | – |
| Macomb | 39 | 43 | – | 4 | – | 1 |
| Manistee | 16 | 16 | – | – | – | – |
| Marquette-Alger | 40 | 43 | – | 3 | 1 | 1 |
| Mason | 9 | 10 | – | 1 | – | – |
| Mecosta-Osceola | 16 | 16 | – | – | – | – |
| Medical Society of North Central Counties | 23 | 22 | 1 | – | – | 2 |
| Menominee | 14 | 12 | 2 | – | – | – |
| Midland | 15 | 16 | – | 1 | – | – |
| Monroe | 35 | 35 | – | – | 2 | 1 |
| Muskegon | 79 | 80 | – | 1 | – | 2 |
| Newaygo | 13 | 13 | – | – | – | – |
| Northern Michigan | 33 | 37 | – | 4 | 2 | 2 |
| Oakland | 136 | 143 | – | 7 | 3 | 2 |
| Oceana | 11 | 12 | – | 1 | – | – |
| Ontonagon | 8 | 8 | – | – | – | – |
| Ottawa | 32 | 34 | – | 2 | – | – |
| Saginaw | 102 | 102 | – | – | 1 | 4 |
| Shiawassee | 31 | 29 | 2 | – | 1 | 1 |
| St. Clair | 55 | 52 | 3 | – | 1 | – |
| St. Joseph | 23 | 25 | – | 2 | – | – |
| Tuscola | 32 | 31 | 1 | – | – | 1 |
| Van Buren | 27 | 30 | – | 3 | 1 | 1 |
| Washtenaw | 174 | 173 | 1 | – | 3 | 3 |
| Wayne | 1,855 | 1,899 | – | 44 | 26 | 26 |
| Wexford-Missaukee | 21 | 22 | – | 1 | – | – |
| | 4,383 | 4,478 | 30 | 125 | 63 | 77 |
| | | 4,383 | | 30 | | |
| | | 95 | | 95 | | |
| Emeritus and Honorary Members | | | | 43 | | |
| Paid Members | | | | 4,478 | | |
| Total | | | | 4,521 | | |

### Deaths During 1940

We regretfully record the deaths of the following seventy-seven members during 1940:

*Branch County*—A. G. Holbrook, M.D., Coldwater.

*Calhoun County*—Nils O. Byland, M.D., Battle Creek; Walter F. Martin, M.D., Battle Creek; Albert W. Nelson, M.D., Battle Creek, Stuart Pritchard, M.D., Battle Creek.

*Cass County*—C. M. Harmon, M.D., Cassopolis; John H. Jones, M.D., Dowagiac.

*Chippewa-Mackinac*—J. A. Reese, M.D., DeTour.

*Eaton County*—James B. Bradley, M.D., Eaton Rapids; C. A. Lown, M.D., Grand Ledge.

*Genesee County*—B. W. Malfroid, M.D., Flint; Herman G. Rosenblum, M.D., Flint; A. S. Wheelock, M.D., Flint.

*Gratiot-Isabella-Clare*—Ralph E. Dawson, M.D., Blanchard; C. D. Pullen, M.D., Mt. Pleasant.

*Hillsdale County*—William H. Ditmars, M.D., Jonesville.

*Ingham County*—Spencer D. Guy, M.D., Lansing; C. M. Watson, M.D., Lansing; W. G. Wight, M.D., Lansing.

*Ionia-Montcalm*—F. A. Hargrave, M.D., Palo.

*Jackson County*—John W. Page, M.D., Jackson; John C. Smith, M.D., Jackson.

*Kalamazoo County*—Edward Ames, M.D., Kalamazoo.

*Kent County*—T. P. Bishop, M.D., Grand Rapids; Willard Burleson, M.D., Grand Rapids; John F. Cardwell, M.D., Grand Rapids; C. D. Mulder, M.D., Spring Lake; Richard R. Smith, M.D., Grand Rapids; Frank A. Votey, M.D., Grand Rapids.

*Livingston County*—Charles E. Skinner, M.D., Howell.

*Macomb County*—Reginald P. Humphreys, M.D., New Haven.

*Marquette-Alger County*—J. D. Crane, M.D., Ishpeming.

*Medical Society of North Central Counties*—Ruey O. Ford., M.D., Gaylord; F. W. Lee, M.D., Fairview.

*Monroe County*—A. W. Karch, M.D., Monroe.

*Muskegon County*—R. G. Cavanagh, M.D., Muskegon; S. J. Drummond, M.D., Casnovia.

*Northern Michigan Counties*—Robert B. Armstrong, M.D., Charlevoix; J. G. MacGregor, M.D., Boyne City.

*Oakland County*—J. S. Morrison, M.D., Royal Oak; W. W. Wiers, M.D., Royal Oak.

*Ottawa County*—Milan Coburn, M.D., Coopersville; John G. Huizinga, M.D., Holland.

*Saginaw County*—Paul Kahn, M.D., Frankenmuth; Arthur E. Leitch, M.D., Saginaw; Emil P. W. Richter, M.D., Saginaw.

*Shiawassee County*—G. B. Wade, M.D., Laingsburg.

*Tuscola County*—J. E. Handy, M.D., Caro.

*Van Buren County*—Chester A. Wilkinson, M.D., Kendall.

*Washtenaw County*—D. M. Cowie, M.D., Ann Arbor; Theron S. Langford, M.D., Ann Arbor; Coral Adelbert Lilly, M.D., Ann Arbor.

*Wayne County*—J. M. Berris, M.D., Detroit; Josephus M. Burgess, M.D., Northville; Paul W. Butz, M.D., Plymouth;

Manley D. Caughey, M.D., Detroit; A. N. Collins, M.D., Detroit; L. Irving Condit, M.D., Detroit; A. J. D'Alleva, M.D., Detroit; John B. Dibble, M.D., Detroit; William A. Evans, M.D., Detroit; Thos. W. Ferguson, M.D., Detroit; Douglas L. Gordon, M.D., Detroit; Samuel F. Haverstock, M.D., Detroit; H. W. Hewitt, M.D., Detroit; E. C. Hoff, M.D., Detroit; Arthur G. Hubbard, M.D., Detroit; Jacob Levitt, M.D., Detroit; Walter H. MacCracken, M.D., Detroit; R. D. MacKenzie, M.D., Detroit; Wilson Randolph, M.D., Detroit; Bruno J. Sawicki, M.D., Detroit; Roy S. Smith, M.D., Detroit; Theodore H. Smith, M.D., Detroit; G. W. Stockwell, M.D., Detroit; Prosper D. White, M.D., Detroit; H. Wellington Yates, M.D., Detroit; L. L. Zimmer, M.D., Detroit.

### Financial Status

The fiscal year closed December 21, 1940, and the statement of our certified accountants, Ernst & Ernst, shows the financial condition of the Society on that date. The following facts are noted:

The fiscal year of the State Medical Society closed December 21, 1940. Our certified accountants, Ernst & Ernst, have audited the books of the Society and have furnished an analysis of our financial situation. Their report reveals the following facts.

The assets of the Society are given as $39,214.40 as compared with $43,399.91 of a year ago. The smaller assets are due chiefly to allocation of $6,000 (market value) of securities to the Trustee of Medical Defense Fund. The net worth is $37,788.63 as compared with $24,224.35 last year, or a gain of $13,564.28.

There is a strong possibility that a part or all of the money advanced to Michigan Medical Service for organizational and working capital in the amount of $17,544.45 may be repaid during the coming year. The net worth of the Society will be enhanced to the extent that this is done.

The income from dues was $52,770 as compared with $51,518 in 1939, a gain of $1,252. Interest received totaled $829.18, a gain of $66.12 over last year. The total income was given as $50,070.52 as compared with $46,750.95 the previous year. These figures are found by deducting $6,595.98 allocated to the JOURNAL and adding the income from the JOURNAL of $2,740.96, plus interest received and miscellaneous income. The expenses of the Society totaled $36,125.24 divided as follows: The administrative and general $19,909.71, Society activities $10,696.89, committee expense $5,518.64. The expenses were $9,593.51 under the budget estimate.

The security portfolio, as a whole, has not been changed. Securities having a total market value of $6,000 were transferred to Dr. Wm. A. Hyland, Trustee for the Medical Defense Fund. Some bonds showed a total decrease in quoted market value of $637.50. Other bonds showed an appreciation in market value of $211.25. The U. S. Savings bonds showed appreciation due to interest accrual of $176.00. The old stock held by the Society decreased in market value $43.50. The bonds of the Hyland Trustee account showed appreciation of $172.75 and depreciation of $148.75 for a net depreciation of $23.75. The combined net decrease of all securities held in the State Medical Society and the Trustee accounts was $317.50.

The medico-legal defense fund account was closed the previous year (1939) by the allocation on January 13, 1940, of securities worth $6,000 to Dr. Wm. A. Hyland, Trustee. A separate audit of Trustee Hyland's account was made by Ernst & Ernst. It revealed receipts of $1,603.75 from the sale of securities, $387.50 interest received from securities and $75.00 repayment by members of M.S.M.S. of legal fees advanced by the Trustee. This makes total receipts of $2,066.25. Disbursements were for legal fees, $1,640.43 and premium on Trustee's bond, $12.50, totalling $1,652.93. The present bonds in Trustee Hyland's portfolio have a market value of $4,341.25 which, with cash on hand of $413.32, makes a total value of this account of $4,754.57.

To sum up—Income was higher by $1,252, expenses were higher by $1,349 and were less than the budget estimates by $3,026.36. The increase and net worth of the Society for the year was $13,564.28. The JOURNAL, while being subsidized from members' dues by $6,595.98, showed a profit of $2,740.96, an increase in profit over the budget estimate of $584.71. If it had not been subsidized it would have resulted in a loss of $3,855.02. The security accounts showed a loss in market value of $317.50.

From the above figures it will be noted that the Society was operated well within the budget requirements so that it faces the coming year in better financial condition than a year ago. The anticipated loss of income due to war activity in the next few years can probably be met by the substantial saving effected this year.

### The 1940 Annual Meeting

An all-time high in attendance was established at the 1940 Session in Detroit. There was a total registration of 2,561.

The General Session type of scientific program was continued and was heartily endorsed by both the essayists and members.

A lack of available facilities precluded the possibility of a scientific exhibit at the 1940 meeting.

No expense was spared in bringing to Michigan an outstanding array of out-of-state speakers, and every possible provision was made to make the convention attractive. Despite the great expense incurred in maintaining the high standard of the Michigan meeting, a substantial profit again accrued to the Society as a result of the large and well-developed technical exhibit. The registrants at the convention showed their appreciation to the technical exhibitors by being very generous in their attention to this group.

### County Secretary Conferences

Three County Secretary Conferences were held during the year. One in Lansing in January, one in Menominee for the Societies of the Upper Peninsula in July, 1940, and one in Detroit on the occasion of the Annual Meeting in September, 1940.

The January Conference was unique in that one of its sessions was held jointly with the County Health Directors of Michigan. A similar type of conference is planned for 1941. Such an arrangement brings together two important groups, provides for an exchange of viewpoints and helps to better correlate health programs.

### Committees

Time and space do not permit a detailed account of committee activity, but 1940 marked a high point in committee endeavor. The development of a Preventive Medicine Committee by bringing together the chairmen of all health committees has added much to the efficiency of committee activities and has been responsible for better committee correlation.

To the already large group of committees was added the Medical Preparedness Committee and Conference Committee on Prelicensure Medical Education. The Preparedness Committee, working closely with a similar committee of the A.M.A., has and will continue to have much work to do.

### Society Activities

During the year just closed, the 55th County Society Charter was granted. This was accorded the physicians of Huron County and marked the beginning of the "Huron County Medical Society."

As an innovation in 1940, THE COUNCIL approved the idea of holding "Councilor District" meetings. These replace the meetings known as "State Society Nights." Up to this time a district meeting has been held in practically each of the 16 Councilor Districts. In 1941 it is hoped that such meetings can be so correlated that they will follow closely after the Annual Meeting and thereby serve to stimulate the component units to

action on their programs and projects early in their fiscal year.

During 1940 your two Secretaries contacted practically all of the 55 county units. On most occasions they were accompanied by some members of THE COUNCIL.

It is gratifying to report that most of the Societies are well organized and are manifesting a keen interest in both the scientific and sociologic phases of medical practice.

Meetings are held regularly in most societies and attention is properly divided between scientific discussions and those of an economic and political character.

As a result of a recommendation by THE COUNCIL, the House of Delegates in 1940 decided to continue memberships without the collection of dues of all physicians called to Active Military Service. This splendid gesture has been followed by many county societies as well.

During 1940 twelve Secretary's Letters were issued, nine to Secretaries of County Societies and three to all members of the Michigan State Medical Society.

### Michigan Medical Service

While Michigan Medical Service has been operating since March, 1940, as a separate organization, mention should be made of the fact that very strenuous demands have been made upon the time and energies of this COUNCIL, its Executive Committee, the Officers and Administrative personnel in the conduct of the affairs of Michigan Medical Service. These individuals have been most generous in this connection.

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Your Secretary cannot express too sincerely and earnestly to this COUNCIL his appreciation of its fine coöperation and encouragement during the past year. Much commendation is due the committees for their splendid spirit and untiring efforts in the successful execution of many difficult tasks.

To Mr. Burns, executive secretary, and the executive office personnel, too much appreciation for their untiring efforts cannot be expressed.

Mr. Burns has been at all times most coöperative and helpful, and has been a continual source of inspiration and aid. To all those who have aided so generously in the discharge of the duties of this office, your Secretary is truly grateful.

Respectfully submitted,
L. FERNALD FOSTER, M.D., *Secretary.*

*The report with recommendation re dues remission was referred to the County Societies Committee.*

4. *The Treasurer's Report* and the *Trustee's Report* were presented by Dr. Hyland as follows:

## TREASURER'S REPORT—1940

As treasurer of the Michigan State Medical Society, I wish to submit the following report for the year 1940.

As required by the by-laws of the Michigan State Medical Society, the usual indemnity bond was filed with the Secretary of the Michigan State Medical Society.

On April 15, 1940, the $1,000 Kresge Foudation bond was called at $1,040.00. It was decided by the Bond Committee to trade the Kresge Bond in the General Account for the Consolidated Oil Bond in the Trustee Account, in order to obtain cash for current Trustee Account bills without selling any of the Trustee Portfolio.

On August 1, 1940, the General Fund purchased the New York Central Railroad Bond from the Trustee Fund.

The present value of the bonds and securities held by the Michigan State Medical Society, market value as of December 21, 1940, is $22,811.25.

Total funds in my possession as Treasurer of MS MS, including bonds at quoted market prices $22,811.25 and cash in Michigan National Bank $707.59, total $23,518.84.

Respectfully submitted,
WM. A. HYLAND, M.D.,
*Treasurer*

### Report of Trustee Fund of Michigan State Medical Society as of December 21, 1940

On January 13, 1940, the Michigan State Medical Society delivered to Dr. William A. Hyland, Trustee, the following bonds to hold as Trustee replacing the former medical-legal fund, their approximate value being $6,000.

Two New England Gas and Electric Company Bonds
Two Southern Pacific Railroad Company Bonds
Two Grand Rapids Affiliated Bonds
Two New York Central Railroad Bonds
One Consolidated Oil Corporation Bond

On April 1, 1940, the Trustee account sold one Consolidated Oil Company Bond to obtain money for current medical-legal bills.

On August 1, 1940, the Trustee account sold one New York Central Railroad Bond for current medical-legal bills.

| | | |
|---|---|---|
| Total received from sale of Bonds to Michigan State Medical Society | $1,603.75 | |
| Interest received on Securities | 387.50 | |
| Repayment to Trustee Fund by member legal fees advanced | 75.00 | $2,066.25 |
| Paid Legal fees amounting to | 1,640.43 | |
| Paid Premium on Trustee's Bond | 12.50 | |
| | | 1,652.93 |
| Cash on Hand December 21, 1940 | | $ 413.32 |
| Total amount of bonds turn over to Trustee by Michigan State Medical Society quoted at market prices of December 20, 1939 | $6,000.00 | |
| Interest on bonds | 387.50 | |
| | | $6,387.50 |
| Deductions: | | |
| Legal fees paid | 1,565.43 | |
| Premium paid on Trustee's bond | 12.50 | |
| Loss on sale of bonds to M.S.M.S. | 31.25 | |
| Reduction of carrying amount of securities held in trust December 21, 1940, to quote market prices | 23.75 | |
| | | 1,632.93 |
| Balance in Trust Fund December 21, 1940 | | 4.754.57 |
| On deposit at Michigan National Bank | | 413.32 |
| Total market value of bonds in Trustee Fund | | 4,341.25 |
| Total value of Trustee Fund | | $4,754.57 |

WM. A. HYLAND, M.D., *Treasurer*

*These reports were referred to the Finance Committee.*

5. *The Editor's Annual Report* was presented by Dr. Holmes, as follows:

## EDITOR'S ANNUAL REPORT

The selection of scientific articles for THE JOURNAL has been based primarily upon the needs and desires of the general practitioner who represents the key majority of the Michigan State Medical Society membership. Emphasis has been placed, therefore, upon short practical articles of a not-too-highly specialized nature and with most of the attention directed toward diagnosis and treatment of those conditions which are of importance to the man in private practice. The belief that this policy has been acceptable to this large portion of our membership, is enhanced by the fact that no adverse criticism has come to the Editor's attention.

During 1940. THE JOURNAL has published eighty-seven scientific articles averaging three and one-half pages in length. Of this number all were of a general nature: There were forty-three pertaining especially to internal medicine; twelve to eye, ear, nose and throat; nine to gynecology; six to surgery; five to obstetrics; three to orthopedics; three to pediatrics; three to economics; two to proctology; and one to urology. Of these papers, forty-nine were written by members of the Michigan State Medical Society; and thirty-eight were by out-of-state medical leaders, the original papers having been given at a state or county medical society meeting in Michigan. No other sources of scientific papers were used.

The Editor has attempted to stimulate the use of cuts, charts, et cetera, which aids considerably in impressing the reader. Every attempt has been made to keep the scope of papers for each issue well diversified.

There were turned over to the Editor this year some one hundred manuscripts ranging in priority of time from one month to two years. Those papers which pertained to such highly specialized subjects that the reader-interest would be negligible were returned to their respective authors so that they might be submitted to a specialized journal. The papers which were manifestly too long to hold the interest of the general practitioner or whose subject matter did not appear to warrant such extensive use of space were returned to their respective authors with a request that they be condensed; most of which requests were fulfilled.

It is believed that the use of many paragraph and sub-headings, extra spacing and the use of bold face type has improved the reader-interest in the scientific papers. While this takes extra time on the part of the Editor it seems definitely worth it. In the same category, the use of biographies of the authors and cuts, when already available, also add to the value.

During the past year the Editor has written and published forty-five editorials. Each editorial has been submitted to each member of the Publication Committee in order that there may be no conflict with the policy of THE COUNCIL. Eleven of these editorials were reprinted in nine other state medical society journals and two more were quoted.

Two departments were instituted: "You and Your Government," and "You and Your Business" under which heads a reader who may be interested would be able to find the material desired with the least possible inconvenience.

The general physical make-up of THE JOURNAL has also been changed during the year in an effort to make its appearance more modern and yet not lose the dignity of a scientific journal.

Only one typographical error has been invited to the Editor's attention during the past year.

Before outlining the plans for the coming year the Editor wishes to thank Dr. Haughey and his Publication Committee who have been most helpful and cooperative, and the Bruce Publishing Company who have lent every available facility both physical and technical. Without the aid of these adjuncts and Secretary Foster and Mr. Burns it would have been impossible to have accomplished these changes. To all of them and especially to Dr. Haughey and Mr. Burns, the Editor is deeply indebted.

**Program for 1941**

The so-called "throw-away" journals are simply "pirates" in the publication field since they abstract articles published in legitimate journals and print them to attract a certain class of readers in order to sell advertising which should go to the legitimate journals. They have been troublesome to all of us. In an attempt to take away some of their appeal and in order to provide the readers of THE JOURNAL with abstracts from articles published in other state journals and also to provide national scope for authors who publish articles in THE JOURNAL of the Michigan State Medical Society, we are instituting, this year a plan by which the author (when his manuscript is accepted) will submit a short abstract of the highlights of his paper. These will be made available at the time of publication to the other state journals and in time a system will be worked out whereby the readers of THE JOURNAL of the Michigan State Medical Society will have available, in abstract form, the cream of all scientific articles published in the United States.

Arrangements have been made with the Wayne University College of Medicine to publish each month, beginning in January, a clinico-pathological conference in concise and interesting form. It is believed that these will be very popular since they will contain only pertinent and important facts. Arrangements have been made to publish these in the same form as other scientific articles since the average reader shies from long articles in small type. The Publication Committee has authorized the allowance of one or two complimentary cuts to accompany these clinico-pathological conferences.

There has been a satisfactory response to the cartoons which it is hoped will be a regular feature of THE JOURNAL. Dr. C. L. A. Oden has been most kind in giving freely of his skill.

The Editor would like to end this report with a plea to the Councilors to forward to the Editor any comments which they may hear in their districts. It is very difficult to induce the readers to criticize by letter. Especially desirable are any suggestions which would make THE JOURNAL more readable, since a journal which is not read should not be published.

ROY HERBERT HOLMES, M.D., *Editor.*

*The report was referred to the Publication Committee.*

6. The *Report of the Publication Committee* was presented by the Chairman, Dr. Haughey.

## REPORT OF THE PUBLICATION COMMITTEE—1940

Your Committee met January 10 and considered the following matters:

1. The Editor gave a report on the year's activities.

2. The *Journal Budget* was studied, and motion was made by Drs. DeGurse-Beck that this committee recommend to the Finance Committee that an increase in the Editor's Expense of $200.00 (from $600 to $800) be made. Carried unanimously.

3. *Advertising* was generally discussed. The committee felt that the acceptance of the AMA Councils and Committees on indicated products should be continued as a policy of THE JOURNAL, and authorized Mr. Burns, on motion of Drs. DeGurse-Umphrey, to so inform particular firms which were prospective advertisers. Carried unanimously.

4. *Reprints.*—The request of a firm for permission to make reprints of an article which appeared in the MSMS JOURNAL was studied. This firm is not an advertiser. Motion of Drs. Beck-Perkins that the matter be referred to Mr. Burns to handle—to the effect that permission to make reprints of MSMS JOURNAL articles is given only to authors, and to advertisers when specifically authorized by the Publication Committee. Carried unanimously.

5. *Blue Book.*—The Wisconsin Blue Book, and the high expense involved in the printing of this legal summary, were discussed. Motion of Drs. DeGurse-Beck that such a blue book for Michigan be not authorized at this time, as much of the material is being published in digested form in the MSMS JOURNAL in the "You and Your Business" column. Carried unanimously.

6. *Matters presented by the Editor:*

(a) Tuberculosis Abstracts, to be used as fillers in THE JOURNAL, were discussed, and authorized. They are to be used for a limited time to ascertain if there is any interest.

(b) Color for THE JOURNAL was discussed. Motion of Drs. DeGurse-Perkins that green pages be used in the March, 1941, JOURNAL, as an experiment. Carried unanimously.

(c) Column for experimental work. This was given full study and was authorized by the Publication Committee.

Respectfully submitted,

WILFRID HAUGHEY, M.D., *Chairman.*
O. O. BECK, M.D.
T. E. DEGURSE, M.D.
ROY C. PERKINS, M.D.
C. E. UMPHREY, M.D.

*The report was referred to The Finance Committee.*

7. *Report of Medical Legal Cases* pending was presented by Dr. Hyland, received and placed on file, on motion of Drs. Riley-Cummings. Carried unanimously.

8. *Committee Reports.*—The following reports of committees were presented:

(a) *Legislative Committee.*—Report from Executive Secretary Burns. The various items, including necessary amendments to the afflicted child act, were thoroughly discussed. Motion of Drs. Moore-DeGurse that a committee be appointed to review the various recommendations made and to refer back to The Council at its meeting on January 12. Carried unanimously.

Committee: Drs. Moore, Chairman; Cummings, Haughey, Carstens, Urmston.

Motion of Drs. DeGurse-Sladek that the report of the Legislative Committee be accepted and approved. Carried unanimously.

(b) *Midwifery (from Maternal Health Committee report).*—The case of People vs. Hildy was presented by the Executive Secretary and thoroughly discussed. Motion of Drs. Cummings-Barstow that this matter be referred to the MSMS Legislative Committee to send to the State Board of Registration in Medicine with the suggestion that the State Board consider and take action toward necessary changes in the Medical Practice Act to clarify this midwifery problem. Carried unanimously.

Field representatives in obstetrics (from Maternal Health Committee) were discussed by Dr. Cummings, who felt that this work should be educational, not practicing or doing private consultations. The Secretary was instructed to insert in letters going to county medical societies scheduling field representatives in obstetrics a paragraph containing the above recommendation.

(c) *Committee on NYA Health Program.*—This report was presented and discussed. Motion of Dr. Holmes-several that NYA Health Consultant Carey be requested to send detailed information concerning procedures and the per diem arrangement, in order that these facts can be presented concisely to the county medical societies; also to send a copy of the fee schedule to be used in those counties too small to use the per diem arrangement. Carried unanimously.

Dr. Umphrey advised that the Michigan Society of Roentgenologists objected to the x-ray phase of the NYA program. This was thoroughly discussed, during which Dr. Urmston presented the x-ray arrangement at Hurley Hospital, Flint. Motion of Drs. Cummings-Umphrey that The Council endorses the attitude of the x-ray society but inasmuch as the subject is technical and a matter of economics, it recommends the X-Ray Society contact Dr. Carey direct, in order that the problem can be more readily appreciated. Carried unanimously.

(d) *Postgraduate Medical Education Committee.*—Report was presented by Dr. Cummings, and approved on motion of Drs. Riley-Holmes. Carried unanimously.

President Urmston's appointments of Drs. Norris and Pino to the Postgraduate Medical Education Committee were confirmed, on motion of Drs. Huron-Cummings. Carried unanimously.

(e) *Preparedness Committee* report was read, containing the recommendation that letters be sent to all physicians who have not returned their AMA medical preparedness questionnaires. Motion of Drs. Holmes-Riley that lists of the non-signers be sent to the medical preparedness committee in each county or district for personal contact, except Wayne County. Carried unanimously. Motion of Drs. Haughey-Cummings that individual letters be sent to physicians in Wayne County who have not completed their questionnaires. Carried unanimously. Motion of Drs. DeGurse-Huron that the report of the Preparedness Committee, as amended in the matter of sending out the letters, be adopted. Carried unanimously.

9. *Voluntary Liens in Accident Cases.*—The Executive Secretary was invited to give a report on this activity which culminated successfully in adoption of an agreement on January 8, 1941. Motion of Drs. DeGurse-Barstow that this agreement be approved and adopted by The Council and be published in the MSMS JOURNAL. Carried unanimously. Motion of Drs. Haughey-Holmes that Dr. A. S. Brunk be appointed as the MSMS representative to the Conference Committee. Carried unanimously. Motion of Drs. Cummings-Riley that the Executive Secretary be thanked for the inauguration and development of this project. Carried unanimously.

*Presentation of Gavel to the Chairman.*—A gavel was presented to Council Chairman Brunk by Executive Secretary Burns as an expression of his appreciation of Dr. Brunk's counsel during the past eleven years.

The meeting was recessed at 12:10 p.m.

## SECOND SESSION

The Second Session convened at 1:30 p.m., with all who answered to the roll call at the First Session being present.

10. *Communications from the Wayne County Medical Society* re (a) the barbiturates bill to include sulfanilamide; and (b) amendments to the Medical Practice Act, were presented and discussed. Motion of Drs. Umphrey-Riley that The Council urges the State Board of Registration in Medicine to offer necessary amendments to the Medical Practice Act at the 1941 Legislative Session, and it urges the State Health Commissioner to offer a barbiturates bill, including the sulfanilamide group to the 1941 Legislature, the aid of the MSMS Legislative Committee being proffered to these two state departments in the passage of these bills. Carried unanimously.

11. *Additional Michigan Facilities for Care of Infantile Paralysis Cases.*—Dr. Barstow presented a project for the care of these cases in Michigan, which was thoroughly discussed and referred to a committee composed of the Chairman of The Council, the Secretary and the Executive Secretary to draft a suitable resolution and to submit same to The Council for final approval.

Subsequently the Committee presented the following resolution:

"Whereas, Large sums of money are being collected in Michigan each year for the care and treatment of infantile paralysis cases,

"Be It Resolved, That The Council of the Michigan State Medical Society approves of the establishment in the state of additional special facilities for the care and treatment of such cases."

Motion of Drs. Riley-Miller that the report of the committee be adopted. Carried unanimously.

12. *Preparedness Committee.*—The matter of the personnel of the Medical Preparedness Committee of the State Society was discussed and, on motion of Drs. Holmes-Moore, laid on the table until the Mid-summer meeting of The Council. Carried unanimously.

## M.M.S. PROGRESS REPORT

13. *Michigan Medical Service.*—Dr. Carstens gave a progress report as follows, which was accepted and placed on file, on motion of Drs. Sladek-Perkins. Carried unanimously.

### Enrollment of Subscribers

The following is the cumulative number of persons enrolled:

| Month | Plan Medical Service | Plan Surgical Benefit | Total Enrollment |
|---|---|---|---|
| March | 1,360 | 58,658 | 60,118 |
| April | 1,341 | 60,368 | 61,709 |
| May | 1,352 | 61,783 | 63,135 |
| June | 1,416 | 63,646 | 65,062 |
| July | 1,594 | 65,388 | 66,982 |
| August | 1,700 | 65,749 | 67,449 |
| September | 1,758 | 67,558 | 69,316 |
| October | 4,346 | 86,050 | 90,396 |
| November | 4,677 | 99,243 | 103,920 |
| December | 4,956 | 112,594 | 117,550 |

### Registration of Doctors

The number of physicians who have registered with Michigan Medical Service has increased steadily. As of November 30, 1940, there were 3,321 doctors of medicine registered with Michigan Medical Service—approximately three-fourths of the total possible number.

In two county medical societies, 100 per cent of the members are registered with Michigan Medical Service and in thirty-two others, from 75 per cent to 99 per cent of the members are registered.

### Services and Payments to Doctors

During the past nine months, 4,625 subscribers have received services through Michigan Medical Service for which 1,337 doctors of medicine will receive in excess of $194,000.

Payments have been made to doctors in 70 of the 83 counties in Michigan and one out of every four doctors has been paid through Michigan Medical Service for services to subscribers.

The average payment for a patient under the Surgical Benefit Plan has been $47.11; for a patient under the Medical Service Plan, $16.27; or an average of $38.89 per patient.

14. *Reports of Individual Councilors.*—The Chair called upon each Councilor to give a report of the condition of the profession in his district. These reports were given verbally and were generally to the effect that the profession is working together harmoniously and making good progress in scientific and social endeavor.

The meeting was recessed at 3:50 p.m.

## THIRD SESSION

The Third Session Convened at 8 p.m. with all who answered the roll call at the First Session being present.

15. *The Auditor's Report* was presented in brief by Dr. Moore, who also read the minutes of the Finance Committee meeting of January 10, 1941, including MSMS Budgets for 1941.

## REPORT OF THE FINANCE COMMITTEE

Your Committee met January 10 and considered the following matters:

1. *Auditor's Report.*—Chairman Moore reviewed the report of Ernst & Ernst's annual audit of the Society's books for 1940.

2. *Net Worth.*—Motion of Drs. Morrish-Cummings that the net worth of the Society should not exceed at any time $50,000. Carried unanimously.

3. Motion of Drs. Cummings-Barstow that $7,500 be invested in U. S. Government bonds, preferably U. S. Savings Bonds. Carried unanimously.

4. *Budget.*—The proposed 1941 budget was considered by the Committee. Motion of Drs. Morrish-Cummings that the Committee recommended that the salary of the Executive Secretary be set at $8,000. Carried unanimously. The tentative budget was then agreed upon for presentation to The Council.

VERNOR M. MOORE, M.D., *Chairman.*
W. E. BARSTOW, M.D.
H. H. CUMMINGS, M.D.
R. S. MORRISH, M.D.
O. D. STRYKER, M.D.

### BUDGET FOR 1941

| | |
|---|---|
| INCOME | |
| 4,200 members at $12 (plus ½ and ¼ dues of new members) | $51,000.00 |
| Net Income from JOURNAL | |
| Interest | 100.00 |
| Miscellaneous Income | 100.00 |
| Total Income | $51,200.00 |
| Less allocation to THE JOURNAL at $1.50 | 6,300.00 |
| NET INCOME | $44,900.00 |
| APPROPRIATIONS: | |
| *Administrative and General* | |
| Medical Secretary Salary | $ 3,600.00 |
| Executive Secretary Salary | 8,000.00 |
| Other Office Salaries | 5,100.00 |
| Extra Office Help | 1,020.00 |
| Office Rent | 1,260.00 |
| Printing, Sta. & Supplies | 1,000.00 |
| Postage | 900.00 |
| Insurance and Fidelity Bonds | 190.00 |
| Auditing | 265.00 |
| New Equipment and Repairs | 300.00 |
| Telephone and Telegraph | 800.00 |
| Michigan Sales Tax | 75.00 |
| Pay roll taxes | 154.00 |
| Miscellaneous | 250.00 |
| Total | $22,914.00 |
| Less expenses redistributed to JOURNAL | 1,800.00 |
| TOTAL ADMINISTRATION AND GENERAL | $21,114.00 |
| *Public Relations Bureau* (authorized by 1940 House of Delegates): | |
| Salary | $ 2,400.00 |
| Travel | 400.00 |
| Stenographic Service | 600.00 |
| Office Expense | 500.00 |
| TOTAL FOR PUBLIC RELATIONS BUREAU | $ 3,900.00 |
| *Society Expense* | |
| Council Expense | $ 3,000.00 |
| Delegates to AMA | 500.00 |
| Secretaries Conferences | 1,000.00 |
| General Society Travel Exp. | 2,000.00 |
| Secretary's Letters | 500.00 |
| Publication Expense | 200.00 |
| Reporting Annual Meeting | 140.00 |
| Education Expense | 2,000.00 |
| Sundry Society Expenses | 1,200.00 |
| National Conf. on Medical Service | 200.00 |
| Organizational Expense | 1,000.00 |
| Legal Expense | 500.00 |
| Woman's Auxiliary—Annual Meeting | 200.00 |
| Contingent Fund | 766.00 |
| Total | $13,206.00 |
| Less gain from Annual Meeting | 2,320.00 |
| TOTAL SOCIETY EXPENSE | $10,886.00 |
| *Committee Expense* | |
| Legislative Committee | $ 2,000.00 |
| Distribution of Medical Care | 150.00 |
| Joint Committee on Health Education | 850.00 |
| Postgraduate Education | 2,400.00 |
| Preventive Medicine | 200.00 |
| Cancer Committee | 1,000.00 |
| Child Welfare | 250.00 |
| Iodized Salt | 100.00 |
| Heart & Degenerative Diseases | 100.00 |
| Industrial Health | 200.00 |
| Maternal Health | 100.00 |
| Mental Hygiene | 50.00 |
| Radio | 25.00 |
| Syphilis Control | 325.00 |
| Tuberculosis Control | 100.00 |
| Public Relations Committee | 500.00 |
| Ethics Committee | 100.00 |
| Scientific Work Committee | 200.00 |
| Medical Preparedness | 100.00 |
| Sundry Other Committees | 250.00 |
| TOTAL COMMITTEE EXPENSE | $ 9,000.00 |
| GRAND TOTAL | $44,900.00 |

BUDGET FOR THE JOURNAL, 1941

| | |
|---|---|
| INCOME | |
| Subscription from members | $ 6,300.00 |
| Other subscriptions | 200.00 |
| Advertising Sales | 10,000.00 |
| Reprint Sales | 1,500.00 |
| Journal cuts | 150.00 |
| TOTAL JOURNAL INCOME | $18,150.00 |
| EXPENSES | |
| Editor's Salary | $ 1,200.00 |
| Editor's Expense | 800.00 |
| Expense of prior year | |
| Printing and mailing | 11,300.00 |
| Cost of reprints | 1,500.00 |
| Allocation of administrative and general office expense | 1,800.00 |
| Discounts and commissions on advertising sales | 1,300.00 |
| Postage | 2.50.00 |
| TOTAL JOURNAL EXPENSE | $18,150.00 |

Motion of Drs. DeGurse-Sladek that the budgets as presented be adopted. Carried unanimously. Motion of Drs. Moore-Huron that the Finance Committee report be adopted. Carried unanimously.

Bills payable were presented and ordered paid on motion of Drs. Perkins-DeGurse. Carried unanimously.

16. The *Report of County Societies Committee* including the *Reference Report* was presented by Dr. Sladek.

## REPORT OF THE COUNTY SOCIETIES COMMITTEE

Your Committee met January 10 and considered the following matters:

1. The Committee reviewed the list of twenty-three counties which have not sent in the resolution calling for a thirty-year extension of the Charter of the Michigan State Medical Society, and recommend that the Councilors contact each Society in their respective Districts which have not sent in the resolution, urging them to do so as soon as possible.

2. The recommendation of the Radio Committee to the House of Delegates, 1940, which was approved by the House, and which is as follows: "That the State Society and/or the Joint Committee on Health Education set up some method for evaluation of the radio programs, and that some effort should be made to coordinate the radio programs on medical subjects now being broadcast by the U. of M., Wayne County Medical Society, and those sponsored by the Joint Committee on Health Education so as to avoid overlapping and repetition," was studied by the Committee. It was suggested that the Councilors contact their various societies with a view to determining the relative value of the radio programs. The Committee also recommends that the County Societies endeavor to develop or select speakers to present talks over the radio which will impress their audiences.

3. In accordance with the suggestion in President Corbus' address at the 1940 annual meeting: The County Societies Committee agrees that some effort should be made to stimulate the writing of scientific articles by our membership and recommends that each Councilor constantly stress this endeavor at his visits to his County Medical Societies.

4. Postgraduate Medical Education. In an effort to stimulate more interest in the Postgraduate courses we would recommend that the Postgraduate Medical Education Committee send out a questionnaire to all members relative to subject matter of future postgraduate courses. It is possible that a more acceptable subject matter will react in better attendance.

We would also like to suggest to the Postgraduate Committee the possibility of holding one large all-day conference given by more outstanding lecturers instead of the four weekly meetings.

In view of the possible examination for certification of proficiency to be given by our two state universities we believe it advisable to publish a list of subjects which were covered in the previous four years. We feel that these examinations are a commendable addition to the postgraduate program, resulting in a certificate which will have a definite meaning.

5. We recommend that some study be instituted at this time relative to school athletic examinations and treatment of injured students.

E. F. SLADEK, M.D., *Chairman.*
WILFRID HAUGHEY, M.D.
P. A. RILEY, M.D.
W. H. HURON, M.D.
A. H. MILLER, M.D.

## REFERENCE REPORT OF COUNTY SOCIETIES COMMITTEE

1. *Secretary's Report*—(A) The Committee recommends that remission of 1941 dues for service men be limited to those who have been certified by County Society Secretary as being in good standing as of January 1, 1941, and that a form be printed in THE JOURNAL for the county secretaries' use.

(B) We recommend the acceptance of the Secretary's Report in its entirety, noting that this year it exhibits the same thoroughness and clarity of analysis of Society affairs, as it has in the past. We heartily commend our Secretary for his zeal and diligence.

E. F. SLADEK, M.D., *Chairman.*

## REFERENCE REPORT OF PUBLICATION COMMITTEE

Motion of Drs. Sladek-Huron that the reports be adopted was carried unanimously.

17. *Reference Report of Publication Committee* was presented by Dr. Haughey to the effect that the Editor's Report was received and the Editor was thanked for his good work and the progress of THE JOURNAL during the past year. Motion of Drs. Riley-Moore that the report of the Reference Committee be adopted. Carried unanimously.

18. *Executive Secretary to West Virginia.*—The Council approved Mr. Burns' appearing on the program of the West Virginia Medical Society Secretary Conference, January 18, on motion of Drs. Sladek-Miller. Carried unanimously.

19. *Medical Testimony.*—The Executive Secretary presented the recent Supreme Court case of DeVries vs. Owens.

The meeting was recessed at 10:05 p.m.

## FOURTH SESSION

The Fourth Session convened at 10:15 a.m. January 12, 1941, with all who answered to the roll call at the First Session being present.

20. *Minutes.*—The minutes of the First, Second and Third Sessions of The Council, January 11, 1941, were read, corrected and approved.

## REFERENCE REPORT OF FINANCE COMMITTEE

21. *Reference Report of Finance Committee.*—Chairman Moore reported as follows:

(a) Treasurer's Report. This report was studied by the committee and accepted with the exception of the last line which was changed to read "Total funds in my possession as Treasurer of the MSMS including bonds at quoted market prices are $22,811.25 and cash in Michigan National Bank $707.59 totalling $23,518.84." Motion of Drs. Sladek-Miller that the report be accepted. Carried unanimously.

(b) Trustee Hyland's Report. The committee approved of this report. Motion of Drs. Cummings-Sladek that this report be accepted. Carried unanimously.

(c) Publication Committee Report was approved. Motion of Drs. Moore-Cummings that this report be accepted. Carried unanimously. Motion of Drs. Moore-Cummings that the Reference Committee Report be accepted as a whole. Carried unanimously.

## REFERENCE REPORT OF AFFLICTED CHILD LAW AMENDMENTS

22. *Report of Committee on Amendments to Afflicted Child Law.*—Chairman Moore reported as follows: The following principles were recommended:

1. Personnel of Commission should be selected on basis of knowledge, interest and ability. Because this is largely a medical problem, at least one doctor of medicine should be appointed to the Commission.

2. The Administrator should be a doctor of medicine. If a business manager is needed, he should be an assistant under the medical administrator.

3. The Commission should be designed the "Sick Child Commission." All sick children, whether crippled or afflicted, should come under this one commission.

4. Five medical coördinators to integrate the work of the Commission throughout the state should be provided.

5. Medical Filter Boards, nominated by the county medical societies and paid a nominal fee by the Commission for investigation work, to coöperate with the medical coördinators, should be arranged. The power of admission and/or rejection of cases, either on medical or economic grounds, should be in the hands of the Commission.

6. Cases needing special medical care should be delegated by the medical administrator to the medical coordinator to refer to doctors of medicine possessing the necessary skill. Cases which do not need special treatment should be cared for by local family doctor. Cases should be transferred from the general to the special group as circumstances demand.

7. The medical coördinator should decide the degree of economic filtering, using the facilities of established fact-finding agencies in this work. The Sick Child Commission should determine the economic level of cases to come within the jurisdiction of the Commission. Service to be rendered by the Commission to be limited to the funds available, on the basis of need. Hospital stay to be determined by the attending doctor, with the advice of the medical coördinator in unusual cases.

8. Rates and fee schedules for hospitals and doctors to be arrived at by conference between the Commission and interested groups.

The report was discussed generally by those present. It was pointed out that in drafting a new law, three possibilities should be kept in mind, (1) the project could be wholly in the hands of the state; (2) it could be a jointly financed affair between the respective counties and the state, or (3) it could be transferred to the State Welfare Commission. Discussion brought out that the afflicted child should be administered exclusively by the state, rather than dividing the responsibility between the state and the eighty-three counties and thus running into eighty-three methods of handling the situation. Objections to the plan whereby the afflicted children law administration would be transferred to the State Welfare Department were summarized as follows: (1) Earmarked money is necessary —not what is left over *after* food, clothing, fuel, shelter have been provided. Neglect will result just as neglect now exists in welfare cases in certain counties particularly where they have the 15 mill tax limitation. (2) Problem of the sick child is separate and distinct from the problem of relief—40 per cent of the afflicted children are not on relief, but come from the borderline group. (3) The Welfare Department must limit its work to *indigents*. (4) There would be as many types of social welfare programs as there are counties.

The difficulty of providing for the regular needs of medical care of afflicted children, and particularly in case of epidemics, was discussed. It was also pointed out that the acute emergency case should be taken care of by the county; that the afflicted child law should take care of those chronic conditions which can be readily remedied, thus bring the child back to good health and insure their becoming healthy self-supporting citizens. Dr. Cummings stated that there should be at least one medical man on the Commission, plus a medical man as administrator, plus 5 to 7 medical coördinators.

Motion of DeGurse-Moore that the recommendations of the special committee on afflicted child amendments be approved. Motion of Drs. Umphrey-DeGurse that the above motion be amended as follows: and in addition that the present committee of The Council plus the Child Welfare Committee of the MSMS be empowered to contact the proper agencies for the drafting of the proposed bill. The amendment was carried unanimously. The main motion was then put and carried unanimously.

The Council felt that if it became probable that the afflicted child were to be placed under the State Welfare Department, the afflicted child should be divided into two groups: 1. emergency cases, to be paid for by the county; and 2. chronic remedial cases to be paid for by the State.

23. *Preventive Medicine Committee* report was given by the Executive Secretary: The recommendation of the Cancer Committee that one half of the additional expense of Frank Power, M.D., Field Representative in Cancer, be paid by the MSMS out of the Cancer Committee budget (the other half to be paid by the State Health Department) was approved on motion of Drs. Huron-Umphrey. Carried unanimously. The recommendation of the Cancer Committee that a bill be drafted which would provide for a cancer control program in Michigan was discussed. The Council felt that the Cancer Committee might well draft such a bill to be presented to the Michigan Legislature by some such agency as the Women's Field Army or the State Health Department.

24. *Recommendations of Past-President Corbus,* made in his President's Address, (a) that the young medical graduate be encouraged to join organized medicine by offering him reduced dues, and (b) that a committee on Prelicensure Education be named with additional representation from the State Board of Registration in Medicine and the Michigan Hospital Association, the objective of which is to develop a coöperative plan for intern training, were presented. Motion of Drs. Holmes-Haughey that the Chairman of The Council appoint a committee to investigate the possibility of carrying out these suggestions. Carried unanimously.

25. *Election of Secretary.*—Motion of Dr. Haughey-several that L. Fernald Foster, M.D., be elected secretary to succeed himself. Carried unanimously.

26. *Election of Treasurer.*—Motion of Dr. Perkins-several that Wm. A. Hyland, M.D., be elected treasurer to succeed himself. Carried unanimously.

27. *Election of Editor.*—Motion of Dr. Haughey-several that Roy Herbert Holmes, M.D., be elected editor to succeed himself. Carried unanimously.

28. *Appointment of Executive Secretary.*—Motion of Dr. Umphrey-several that Wm. J. Burns be appointed to succeed himself. Carried unanimously.

29. *Regrets.*—The Council on motion of Dr. Perkins-several extended the sincere regrets of those present to Councilors Hubbell and Stryker on their inability to attend the 1941 Midwinter session, and to Councilor Morrish who was ill and confined to his room at the Dearborn Inn. Carried unanimously.

30. *Thanks.*—Chairman Brunk expressed his thanks to the members of The Council for their attention, hard work and coöperation. Dr. Moore, in behalf of the members of The Council, commended the Chairman on his excellent and smooth handling of the affairs during the session.

31. *Adjournment.*—The meeting was adjourned at 12:05 p.m.

## REPORT OF AUDITOR FOR 1940

January 4, 1941

Executive Committee of the Council,
Michigan State Medical Society,
Lansing, Michigan.

We have examined the balance sheet of the Michigan State Medical Society as of December 21, 1940, and the statements of income and expense for the fiscal year ended at that date, have reviewed the system of internal control and the accounting procedures of the Society and, without making a detailed audit of the transactions, have examined or tested accounting records of the Society and other supporting evidence, by methods and to the extent we deemed appropriate.

The Society was organized under the laws of the State of Michigan on September 17, 1910, as a corporation not for pecuniary profit. Action has been taken to renew the charter which expired by lapse of time prior to December 21, 1940. The Society is affiliated with the American Medical Association and charters county medical societies within the State of Michigan. The purposes of the Society are the promotion of the science and art of medicine, the protection of the public health and the betterment of the medical profession. In the furtherance of these purposes, the Society publishes THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

### Balance Sheet

A summary of the balance sheets at December 21, 1940, follows:

ASSETS

| | |
|---|---|
| Cash | $15,142.96 |
| Notes and accounts receivable, less reserve | 1,237.49 |
| Securities—at cost, less reserve | 22,811.25 |
| Deferred charges | 22.70 |
| | $39,214.40 |

LIABILITIES

| | |
|---|---|
| Accounts payable | $ 352.27 |
| Unearned income | 1,073.50 |
| Net worth | 37,788.63 |
| | $39,214.40 |

Notes receivable in the amount of $80.00, which had been accepted in settlement of 1931, 1932, and 1933 dues were written off during the year as uncollectible.

Accounts receivable for advertising, reprints, etc., were analyzed and classified as to date of charge and are shown with the balances at December 21, 1940, as follows:

| DATE OF CHARGE | Amount | Per Cent |
|---|---|---|
| October, November and December | $ 857.96 | 78.86% |
| July, August and September | 142.88 | 13.13% |
| January to June, inclusive | 63.14 | 5.80% |
| Prior to January 1st | 24.00 | 2.21% |
| TOTAL | $1,087.98 | 100.00% |

The balances due from county societies represent dues collected for the Society by two county societies and impounded in depositary banks. When and if any of these funds are released by the banks, the Society's share is to be forwarded by the county societies. No payments were received during the year on these accounts.

Based upon our analysis of the accounts receivable and a discussion of their collectibility with employes of the Society, it is our opinion that the reserve of $175.00 is sufficient to provide for collection losses anticipated at the date of this report.

During the year it was determined that the Society was subject to the Federal Insurance Contribution Act with respect to salaries paid to employes since January 1, 1937. The employes' share of the contributions for the period from January 1, 1937, to June 30, 1940, have been charged to them and they are paying the Society over a period of twenty months. The tax is now being paid currently and the employes' shares are being deducted from salary checks.

A schedule of securities owned is included elsewhere in this report, which sets forth the principal amount, cost and quoted market prices at December 21, 1940. Unlisted securities have been valued from information furnished by brokers as to the current bid and sale prices. Securities in the principal amount of $9,000.00, having aggregate quoted market prices of $6,000.00 as at December 20, 1939, were turned over to Dr. William A. Hyland, Trustee, in settlement of the Society's liability to him. Subsequently, bonds in the principal amount of $2,000.00 were purchased from Dr. Hyland at their approximate quoted market prices.

During the year, the Michigan Medical Service was formally incorporated and commenced operations. The Society advanced $10,000.00 for working capital, the liability for which had been provided for in the preceding year, and also paid certain expenses prior to the commencement of operations by the Michigan Medical Service. At December 21, 1940, the total of the advances to and expenditures for the Michigan Medical Service amounted to $17,544.45. We understand that these advances and expenditures are to be repaid to the Society only from earnings of the Michigan Medical Service with the permission of the Insurance Department of the State of Michigan. Because of the uncertainty of repayment of these items, a reserve has been provided for possible loss of the total amount of $17,544.45.

Deferred charges represent costs incurred prior to December 21, 1940, with respect to the 1941 annual meeting of the Society. In accordance with established policy, such items are properly chargeable to future operations.

Provision has been made for all ascertained liabilities at December 21, 1940.

Collections of 1941 dues and overpayments of dues for prior years have been shown as unearned income.

### Income and Expense Statement

A summary of the income and expense statement for the fiscal year ended December 21, 1940, is presented in the accompanying schedule.

As in prior years, $1.50 of each member's annual membership fee has been allocated to subscription income of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

In the accompanying summary a comparison is shown of the budget adopted at the mid-winter council meeting for the year 1940 with the actual results of operations for the year.

As formally adopted, the budgets of operations of both the Society and THE JOURNAL show expenses equal to income. In the budget for THE JOURNAL, however, the amount of $1,856.25 is shown under expenses as "reserve." In order to show the combined budgets on the same basis as the income and expense statement, the amount of $1,856.25 has been classified in the accompanying schedule as income from THE JOURNAL.

Schedules are included herein showing the income from THE JOURNAL and the expenses of the Society in greater detail in comparison with the budgets of THE JOURNAL and of the Society for the year.

### INCOME AND EXPENSE STATEMENT

INCOME

| | |
|---|---|
| Membership fees | $46,174.02 |
| Income from THE JOURNAL | 2,740.96 |
| Interest received | 829.18 |
| Miscellaneous | 326.36 |
| Total Income | $50,070.52 |

EXPENSES

| | |
|---|---|
| Administrative and general | $19,909.71 |
| Society activities | 10,696.89 |
| Committee expenses | 5,518.64 |
| Total Expenses | $36,125.24 |
| Excess of Income over Expenses | $13,945.28 |
| Other income | 76.25 |
| Net Income | $14,021.53 |
| Adjustments to net worth account | 457.25 |
| Increase in Net Worth | $13,564.28 |

BUDGET

| | |
|---|---|
| INCOME | |
| Membership fees | $45,543.75 |
| Income from THE JOURNAL | 1,856.25 |
| Interest | 100.00 |
| Miscellaneous | 75.00 |
| Total Income | $47,575.00 |
| EXPENSES | |
| Administrative and general | $19,390.00 |
| Society activities | 17,783.75 |
| Committee expenses | 8,545.00 |
| Total Expenses | $45,718.75 |
| Excess of Income over Expenses | $ 1,856.25 |
| Other income | –o– |
| | $ 1,856.25 |
| Adjustment to net worth account | –o– |
| Increase in Net Worth | $ 1,856.25 |

## Examination Comments

The following comments relate to our examination and tests of the accounting records of the Society and other supporting evidence.

The demand and savings deposits were confirmed by correspondence with the depositary banks and by reconcilement of the balances reported by them to the amounts shown in the balance sheet. The office cash fund was counted on the morning of December 23, 1940. Bank deposits during three months of the year, as shown in the cash receipts book, were compared with the credits shown on the bank statements on file, and the monthly totals of bank deposits as shown in the cash receipts book where compared with the monthly totals of cash receipts as recorded therein. The recorded cash disbursements for three months of the year were compared with canceled bank checks, invoices and other memoranda. To the extent of the tests made, no irregularities were disclosed.

A listing of the individual accounts receivable was in agreement with the controlling account. In order to confirm the accuracy of the records, confirmation requests were mailed to certain debtors selected by us. To the extent of the replies received, no discrepancies were disclosed.

Securities were examined by us on the afternoon of December 21, 1940, and we obtained a certificate from the bank that the safety deposit box in which the securities are kept, was not opened subsequent to our examination and prior to December 23, 1940.

We secured a written confirmation of the account with the Michigan Medical Service.

We did not correspond with the recorded creditors of the Society for the purpose of confirming the liabilities at December 21, 1940; however, we examined unpaid invoices, expense reports, etc., received subsequent to that date, to satisfy ourselves that all liabilities had been provided for.

In addition to our examination of the items included in the balance sheet, we made tests of transactions entering into the income and expense accounts. Unused membership certificates were examined for the purpose of checking the income from dues. Interest income on bonds was accounted for. Tests of advertising income were made by comparison of billings for advertising with space used in three issues of THE JOURNAL. We also reviewed the items charged to the major expense accounts for the year.

## Opinion

In our opinion, the accompanying balance sheet and related statements of income and expense present fairly the position of the Michigan State Medical Society at December 21, 1940, and the results of its operations for the fiscal year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST,
*Certified Public Accountants.*

BALANCE SHEET
December 21, 1940

| | | | | |
|---|---|---|---|---|
| ASSETS | | | | |
| *Cash* | | | | |
| Demand deposits | | | $ 2,919.56 | |
| Office cash fund | | | 9.28 | |
| Savings deposits | | | 12,214.12 | $15,142.96 |
| *Accounts Receivable* | | | | |
| For advertising, reprints, etc. | $1,087.98 | | | |
| From county societies for dues | 75.19 | $ 1,163.17 | | |
| Less reserve | | 175.00 | $ 988.17 | |
| From officers and employees for pay roll taxes of prior years. | | | 249.32 | 1,237.49 |
| *Securities* | | | | |
| Bonds and stock—at cost | | | $26,717.25 | |
| Less reserve to reduce to aggregate quoted market prices | | | 3,906.00 | 22,811.25 |
| *Michigan Medical Service* | | | | |
| Organizational expenditures made by the Michigan State Medical Society | | $ 7,544.45 | | |
| Advance for working capital | | 10,000.00 | $17,544.45 | |
| Less reserve | | | 17,544.45 | –o– |
| *Deferred Charges* | | | | |
| Expenses in connection with 1941 annual meeting | | | | 22.70 |
| | | | | $39,214.40 |
| LIABILITIES | | | | |
| *Accounts Payable* | | | | |
| For current expenses, etc. | | | $ 311.09 | |
| Pay roll taxes | | | 41.18 | $ 352.27 |
| *Unearned Income* | | | | |
| Dues for the year 1941 | | | | 1,073.50 |
| *Net Worth* | | | | |
| Balance at December 21, 1939 | | | $24,224.35 | |
| Net increase for the fiscal year ended December 21, 1940 | | | 13,564.28 | 37,788.63 |
| | | | | $39,214.40 |

## INCOME AND EXPENSE STATEMENT

Fiscal year ended December 21, 1940

| | | |
|---|---|---|
| INCOME: | | |
| Membership fees | $52,770.00 | |
| Less portion allocated to income of THE JOURNAL for subscriptions | 6,595.98 | $46,174.02 |
| Income from THE JOURNAL—as shown by schedule | | 2,740.96 |
| Interest received | | 829.18 |
| Miscellaneous | | 326.36 |
| Total Income | | $50,070.52 |
| EXPENSES—AS SHOWN BY SCHEDULE: | | |
| Administrative and general | $19,909.71 | |
| Society activities | 10,696.89 | |
| Committee expenses | 5,518.64 | 36,125.24 |
| Excess of Income over Expenses | | $13,945.28 |
| OTHER INCOME: | | |
| Reduction in reserve for notes and accounts receivable | $ 70.00 | |
| Profit on sale of securities | 6.25 | 76.25 |
| Net Income | | $14,021.53 |
| ADJUSTMENT TO NET WORTH: | | |
| Increase in reserve to reduce securities owned to quoted market prices | | 457.25 |
| Increase in Net Worth | | $13,564.28 |

## INCOME FROM "THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY"

Fiscal year ended December 21, 1940

### INCOME

| | |
|---|---|
| Subscriptions from members | $ 6,595.98 |
| Other subscriptions | 122.50 |
| Advertising sales | 10,982.87 |
| Reprint sales | 2,120.23 |
| Journal cuts | 170.16 |
| | $19,991.74 |

### EXPENSES

| | |
|---|---|
| Editor's salary | $ 1,200.00 |
| Editor's expense | 600.00 |
| Expense of prior year | 400.00 |
| Printing and mailing | 9,989.06 |
| Cost of reprints | 1,765.90 |
| Allocation of administrative and general expense | 1,800.00 |
| Discounts and commissions on advertising sales | 1,245.82 |
| Postage | 250.00 |
| | $17,250.78 |
| Net Income | $ 2,740.96 |

## EXPENSES

Fiscal year ended December 21, 1940

### ADMINISTRATIVE AND GENERAL

| | |
|---|---|
| Salary of Medical Secretary | $ 3,600.00 |
| Salary of Executive Secretary | 7,000.00 |
| Other office salaries | 5,100.00 |
| Extra office help | 480.00 |
| Office rent | 1,235.00 |
| Printing, stationery and supplies | 1,019.65 |
| Postage | 865.30 |
| Insurance and fidelity bonds | 187.28 |
| Auditing | 265.00 |
| New equipment and repairs | 137.42 |
| Telephone and telegraph | 796.70 |
| Sales tax | 30.06 |
| Pay roll taxes—current year | 127.15 |
| Pay roll taxes—prior year | 522.53 |
| Pay roll taxes—interest and penalties | 326.62 |
| Miscellaneous | 17.00 |
| | $21,709.71 |
| Less expense redistributed to THE JOURNAL | 1,800.00 |
| | $19,909.71 |

## EXPENSES

*(Continued)*

### SOCIETY ACTIVITIES

| | |
|---|---|
| Council expense | $ 4,176.78 |
| Delegates to American Medical Association | 887.65 |
| Secretaries' conferences | 944.11 |
| General society traveling expense | 2,197.14 |
| Secretary's letters | 217.20 |
| Publication expense | 2.50 |
| Reporting annual meeting | 135.75 |
| Michigan Medical Service | 783.77 |
| Educational expenses | 1,000.00 |
| National Conference on Medical Service | 242.53 |
| Organizational expenses | —o— |
| Legal expense | 710.15 |
| Woman's Auxiliary—annual meeting | 200.00 |
| Sundry society expenses | 1,163.15 |
| Contingencies | —o— |
| | $12,660.73 |
| Less revenue from annual meeting in excess of cost thereof | 1,963.84 |
| | $10,696.89 |

### COMMITTEE EXPENSES

| | |
|---|---|
| Legislation committee | $ 258.27 |
| Committee on distribution of medical care | 131.56 |
| Contribution to joint committee on health education | 800.00 |
| Preventive medicine committee | 41.60 |
| Cancer committee | 888.83 |
| Child welfare committee | 217.06 |
| Iodized salt committee | 24.57 |
| Heart and degenerative diseases committee | 134.38 |
| Industrial health committee | 186.43 |
| Maternal health committee | 99.91 |
| Mental hygiene committee | 50.00 |
| Radio committee | —o— |
| Syphilis control committee | 296.85 |
| Tuberculosis control committee | —o— |
| Public relations committee | 102.71 |
| Ethics committee | 4.65 |
| Membership committee | 4.55 |
| Advisory committee to Woman's Auxiliary | 4.27 |
| Scientific work committee | 166.24 |
| Postgraduate medical education | 2,041.18 |
| Sundry other committees | 65.58 |
| Committee reserve | —o— |
| | $ 5,518.64 |
| Total | $36,125.24 |

## COUNTY SECRETARIES CONFERENCE HELD JANUARY 19

Secretaries from thirty-nine county medical societies of Michigan met in Lansing on January 19 for their Annual Conference. Represented also in the total registration of 123 were forty-five health officers, four presidents of county medical societies, five officers and councilors and twenty-five guests.

The secretaries were welcomed by Hewitt Smith, M.D., Lansing, immediate past president of the Ingham County Medical Society. The morning program, presided over by Horace Wray Porter, M.D., of Jackson, included discussions by Secretary L. Fernald Foster, M.D., President-elect Henry R. Carstens, M.D., Colonel Harold A. Furlong, M.D., Medical Board, State Selective Service Headquarters; H. VanY. Caldwell, Executive Secretary of the Cleveland Academy of Medicine; and Harold A. Miller, M.D., Chairman of the MSMS Legislative Committee.

The health officers joined the secretaries for dinner and the afternoon program, at which President P. R. Urmston, M.D., presided. Mr. Joseph H. Creighton, Director of the Intangibles Tax Division of the Michigan State Tax Commission, reviewed the provisions of the Intangibles Tax Law, with particular emphasis on its effect on physicians. Talks were given by Kenneth E. Markuson, M.D., W. C. C. Cole, M.D., T. M. Koppa, M.D., and L. W. Shaffer, M.D., after which general discussion was led by Carleton Dean, M.D., Deputy State Health Commissioner.

E. B. Andersen, M.D., Iron Mountain, Secretary of the Dickinson-Iron County Medical Society was elected as Chairman of the Secretaries for the coming year.

Among those present were:

*County Society Secretaries.*—H. Kessler, M.D., Alpena; A. B. Gwinn, M.D., Barry; L. Fernald Foster, M.D., Bay; Richard C. Crowell, M.D., Berrien; Wilfrid Haughey, M.D., Calhoun; T. Y. Ho, M.D., Clinton; E. B. Andersen, M.D., Dickinson-Iron; B. P. Brown, M.D., Eaton; John S. Wyman, M.D., Genesee; Sara Burgess, Genesee; E. S. Oldham, M.D., Gratiot-Isabella-Clare; A. W. Strom, M.D., Hillsdale; Roy R. Gettel, M.D., Huron; R. J. Himmelberger, Ingham; J. J. McCann, M.D., Ionia-Montcalm; Horace Wray Porter, M.D., Jackson; Frank L. Doran, M.D., Kent; H. M. Best, M.D., Lapeer; Esli T. Morden, M.D., Lenawee; H. C. Hill, Livingston; D. Bruce Wiley, M.D., Macomb; C. L. Grant, M.D., Manistee; W. S. Jones, M.D., Menominee; H. H. Gay, M.D., Midland; Florence Ames, M.D., Monroe; C. G. Clippert, M.D., North Central Counties; A. F. Litzenburger, M.D., Northern Michigan; John S. Lambie, M.D., Oakland; R. J. Shale, M.D., Ontonagon; D. C. Bloemendaal, M.D., Ottawa; R. S. Ryan, M.D., Saginaw; J. H. Burley, M.D., St. Clair; J. W. Rice, M.D., St. Joseph; E. W. Blanchard, M.D., Sanilac; R. J. Brown, M.D., Shiawassee; Willard W. Dickerson, M.D., Tuscola; J. W. Iseman, M.D., Van Buren; R. K. Ratliff, M.D., Washtenaw; Gaylord S. Bates, M.D., Wayne; J. A. Bechtel, Wayne County Medical Society; B. A. Holm, M.D., Wexford-Missaukee.

*County Society Presidents.*—G. B. Saltonstall, M.D., Northern Michigan; Allan McDonald, M.D., Wayne; C. A. E. Lund, M.D., Barry; J. Bates Henderson, M.D., Huron.

*Councilors.*—A. S. Brunk, M.D., Wayne; W. E. Barstow, M.D., Gratiot; Roy C. Perkins, M.D., Bay.

*Health Officers.*—T. E. Gibson, M.D., A. D. Aldrich, M.D., Carleton Dean, M.D., E. R. VanderSlice, M.D., Paul A. Lindquist, M.D., John Monroe, M.D., Robert F. Van, M.D., S. E. Moore, M.D., Helen Lanting, M.D., R. Lanting, M.D., Lillian R. Smith, M.D., G. B. Moffat, M.D., George Hays, M.D., Emily Ripka, M.D., Goldie B. Corneliuson, M.D., Marie Hagele, M.D., A. B. Mitchell, M.D., Sue Thompson, M.D., Clifton Hall, M.D., Berneta Block, M.D., L. W. Switzer, M.D., C. D. Barrett, M.D., F. T. Andrews, M.D., E. V. Thiehoff, M.D., C. H. Benning, M.D., Frank A. Poole, M.D., Fred O. Tonney, M.D., F. R. Town, M.D., E. J. Brenner, M.D., Lawrence A. Berg, M.D., L. V. Burkette, M.D., Albert C. Edwards, M.D., J. K. Altland, M.D., M. R. Kinde, M.D., V. K. Volk, M.D., H. E. Cope, M.D., Edwin H. Place, M.D., Charles A. Neafie, M.D., K. Haitinger, M.D., L. A. Potter, J. P. Gray, M.D.

*Guests.*—George W. Cooley, Russell J. Darling, John A. MacLellan, J. D. Laux, Otis F. Cook, Harry R. Lipson, Frank G. Lark, C. K. Valade, M.D., Campbell Harvey, M.D., F. E. Luton, M.D., Milton Shaw, M.D., F. E. Reeder, M.D., Frank VanSchoick, M.D., T. Heavenrich, M.D., I. W. Green, M.D., Dean W. Myers, M.D., Henry Cook, M.D., K. L. Burt, M.D.

## THE HUMAN MECHANISM AND THE SUBMARINE

Because the submarine, especially under conditions of warfare, imposes certain environmental conditions not inherent on surface ships, medical problems of a particularly difficult nature develop in the care of the personnel. Recently Brown† has reviewed some of the problems faced by the medical officers responsible for the care of men on this exacting duty. First the selection of men must be especially rigid and the criteria must include strong eyes, keen hearing and the ability to equalize air pressure of 50 pounds to the square inch on the ear drum, since this quality is essential in escape training with the submarine "lung." Nervous stability is important, as a special nervous strain results from this type of work. Much study has been devoted to the vitiation of air which follows from respiration during submergence. The upper permissible limit for carbon dioxide is 3 per cent and the lower limit for oxygen 17 per cent, both of these including a margin of safety. Lethal or toxic gases have caused serious accidents: If sea water gains access to the storage batteries, sodium chloride will be electrolized and chlorine evolved in dangerous volume. Another highly toxic gas which has led to poisoning is arsine, or arseniuretted hydrogen. Methyl chloride has also been known to produce dangerous poisoning in submarines. Besides gases, high temperatures and high humidities, especially under certain circumstances, produce serious problems during submerged operation. Numerous safety devices have been developed to counteract such hazards, including an analyzer to determine the concentration of carbon dioxide in the air and most notably the escape appliance better known as the submarine "lung" and designed for individual escape from the submarine. Finally, the special strain which submarine duty imposes on the personnel requires suitable facilities at the home base for comfort, relaxation and frequent leave periods.—*Jour. A.M.A.*, 116:235, (Jan. 18) 1941.

†Brown, Capt. E. W.: The human mechanism and the submarine. U. S. Naval Institute Proceedings, 66:1608, (Nov.) 1940.

### WHY READ THE BULLETIN?

(Prepared by Special Request)

By Mrs. V. E. Holcombe
President of Woman's Auxiliary to American Medical Association
Charleston, W. Va.

* * * For those of you who possibly may not be entirely up-to-date, I might just mention the *Bulletin* is merely the new name which has been given to the publication that was formerly called the News Letter. It is an attractive little booklet, issued quarterly—price $1.00 per year. It is published for the express purpose of furthering our fellowship, and propagating the principles and ideals of our organization. Advancement in any organization is in direct relationship to the improvement of facilities for the exchange and interchange of facts, information, knowledge and truth, and the proper use of those facilities.

* * * There are so many worthwhile happenings in the medical world of today, which are interesting to know, even if they are never used. With the questionable and critical attitudes toward the medical profession which have arisen in the past few years, it is important that we "pool our assets" and present a united front to adverse forces and influences.

Dr. Parran, Chief of the U. S. Health Service, says that last year was the "healthiest" year in the history of the United States; viz: the death rate was lowest per capita. In spite of all "drives" and scares and tales of neglect, the United States is the healthiest country in the civilized world.

Even the most bureaucratic-minded and garrulous must give the medical men of the world the credit for this condition. Increasing the span of life from thirty-seven years to sixty-five years in less than a century was not accomplished by law-makers.

* * * The immediate goal of our auxiliary is to increase the circulation of the *Bulletin* to include at least one-fourth of our Auxiliary membership.. That means that we should have approximately 6,000 readers. It means that *your* Auxiliary must send at least one-fourth of *your* membership. * * *

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### Ingham County

The Woman's Auxiliary to the Ingham County Medical Society opened the new season with a tea at the home of Mrs. W. H. Welch in East Lansing. We had the pleasure of hearing Mrs. Roger V. Walker of Detroit, our State President, discuss the plans of the State Auxiliary for the year. Other state officers present were Mrs. William Butler of Grand Rapids, Mrs. Oscar Stryker of Fremont, and Mrs. A. O. Brown of Detroit. We also issued invitations to the members of the Ionia, Montcalm, Shiawassee and Eaton County auxiliaries. At the meeting we pledged our support to the National Red Cross drive during which our members made the house to house canvass and operated booths in prominent places of business through the entire week.

Annually in November we entertain the members of the Ingham County Medical Society with a Bohemian feast which precedes the yearly Keno party of the society. This is an event that we have enjoyed for


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several years and receives most enthusiastic support from all of us.

In December, we met at Mrs. D. A. Gailbraith's home and received the greatest incentive possible for the Christmas season from a program in the true Christmas tradition, consisting of old Welch and English carols and readings. At this meeting we completed our plans for gifts and Christmas trees for the Contagious Hospital and the Lansing Children's Home which is an annual custom with us.

Our January meeting promises to be one of unusual interest. Our capable program chairman, Mrs. Robert Breakey, has secured for a speaker a foreign traveler caught on a remote South Sea Island for many months due to the interruption of shipping after the outbreak of war, and we anticipate a large attendance.

—Mrs. C. S. Davenport, *Secretary*

**Ionia-Montcalm**

The Woman's Auxiliary of the Ionia-Montcalm County Medical Society had dinner with the Medical Society at Winter Inn, Greenville, Tuesday, December 10. After dinner, members of the Auxiliary went to the home of Dr. and Mrs. W. L. Bird. Mrs. Kling called the meeting to order with nine members present. Mrs. Kling gave a report about her trip to the Mid-year Board Meeting. Mrs. Eichelberg, Greenville school nurse, gave an instructive talk on health work being done in the schools of Greenville, emphasizing the work on inspection to guard against communicable diseases.

—Mrs. M. A. Hoffs, *Secretary*

**Kent County**

The Woman's Auxiliary to the Kent County Medical Society met December 11 in the auditorium of the Public Museum. Mrs. Guy De Boer, president, presided at the business meeting. Dr. V. M. Moore spoke on "State Controlled Medicine." He showed how Michigan's answer to State Medicine has been the "Michigan Medical Service," a corporation which sells medical insurance to employed groups of twenty-five or more in the low income group.

—Wilamina Winter, *Press Chairman*

**Kalamazoo County**

The Kalamazoo Auxiliary was entertained by the Academy of Medicine at the Burdick Hotel, Tuesday evening, December 16.

George E. Bushnell, Chief Justice of the Supreme Court of Michigan, spoke on "The Mechanics of the Supreme Court."

Members of the Auxiliary brought home-made candy and gifts to be given the Aged People at Christmas time. There were ninety-eight in attendance.

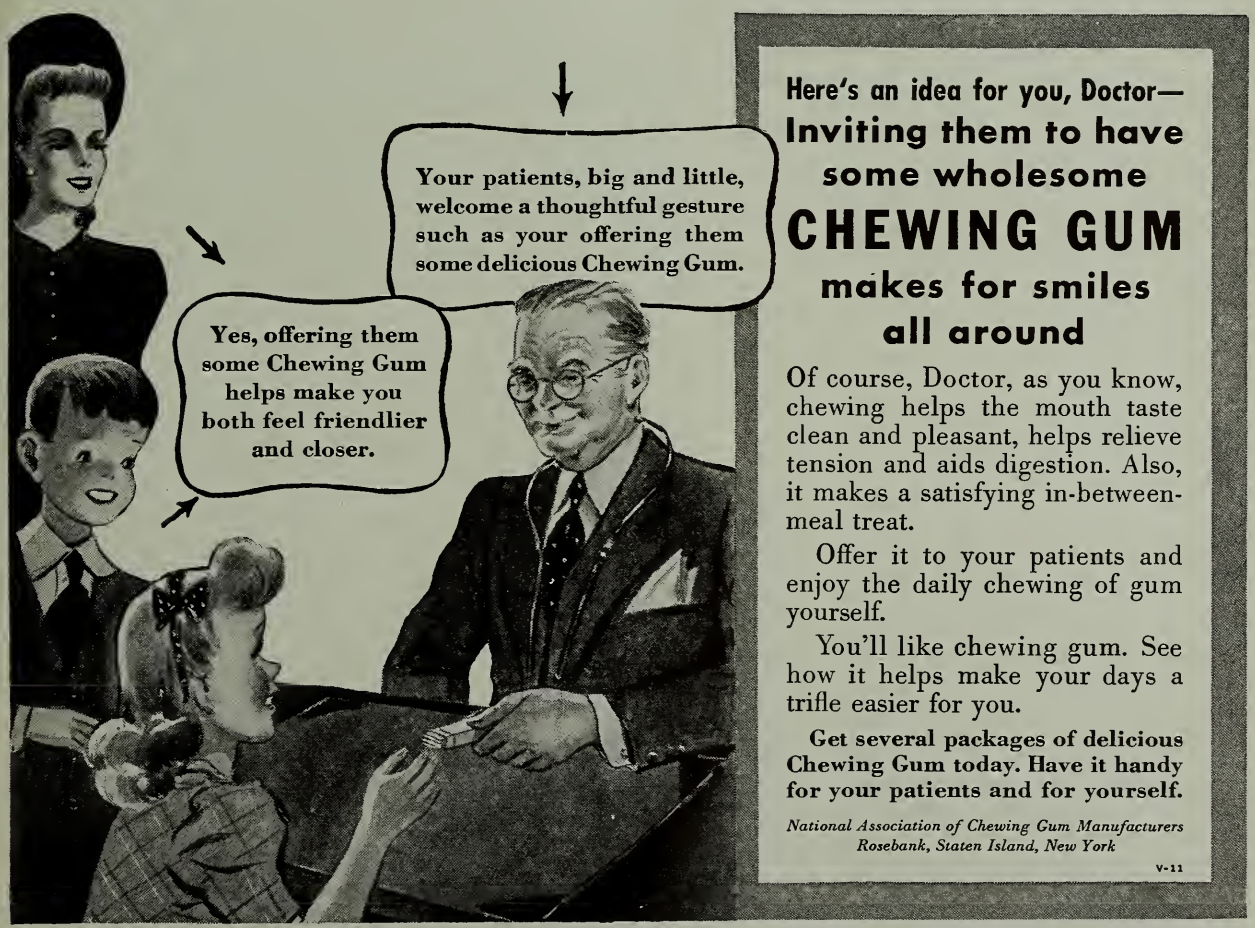
—(Mrs. Gerald H.) Frances Rigterink, *Publicity Chairman*

**Monroe County**

The Auxiliary to the Monroe County Medical Society met at the home of Mrs. William W. Bond on November 18, 1940. After a business meeting the members sewed for the Red Cross. Later refreshments were served by Mrs. Bond and Mrs. L. C. Blakey, joint hostesses.

The Auxiliary met at the home of Mrs. Wm. Acker, December 4, 1940. After the business meeting the members sewed for the Red Cross and refreshments were served by Mrs. Acker and Mrs. J. J. Siffer, joint hostesses.

—Mrs. A. H. Reisig, *Press Chairman*



# MICHIGAN'S DEPARTMENT OF HEALTH

HENRY A. MOYER, M.D., Commissioner, Lansing, Michigan

## MIDWINTER JOINT MEETING

For the second time, a midwinter meeting of health officers and secretaries of county medical societies was held in January. The health officers held a two-day session January 18 and 19 in the Hotel Olds, and the joint session began with a 1 o'clock luncheon, January 19. P. R. Urmston, M.D., president of the Michigan State Medical Society presided at the meeting. H. Allen Moyer, M.D., State Health Commissioner, led brief discussions at the close of each of four ten-minute papers. The four talks were on industrial health, immunization for babies and children, tuberculosis case finding and the five-day treatment for syphilis.

## NEW PNEUMONIA SERUM AVAILABLE

Pneumonia serum produced by an improved method of refinement developed in the Michigan Department of health laboratories is now available in all 47 of the typing centers stocking state serum. This serum is available for types 1, 2, 5, 7 and 8 pneumonia.

## STATE MONEY NEEDED

State funds will be requested of the legislature for three current activities of the Michigan Department of Health which are now supported by federal grants. The three and the amounts to be requested are: Industrial hygiene, $35,000 annually for the fiscal years ending June 30, 1942, and 1943; resort and rural sanitation, $25,000 a year; and venereal disease control, $40,000 a year. The first and third activities are connected with national defense production and with military training.

## MEASLES CASES DOUBLE

Half the counties of the state are now reporting measles in a rise of cases which undoubtedly is preliminary to an epidemic in the next few months.

Reported cases in December were double those of November, and November cases were three times those of October. The figures for the three months are: October 659, November 1,711, December 3,455. Total for the year is 19,998.

Eighty-thousand case epidemics occurred in 1935 and 1938, and presumably 1941 will be another big year. The 1940 cases reported, however, were more than three times the cases reported in the years leading up to the 1935 and 1938 epidemics.

## "FLU" NOT REPORTED

Case reports reaching the State Health Department have not yet reflected the prevalence of influenza which is epidemic in a mild form in some parts of the state. Influenza was formerly reportable only in epidemics, but it was made reportable generally in 1939. In that year 2,288 cases were reported. In 1940, 378 cases were reported, 28 cases in November and 32 cases in December.

## SHIAWASSEE

The new county health unit in Shiawassee County started operation January 1. The director is Dr. T. E. Camper, formerly director of the Iron County Health Department. Offices of the unit are in the courthouse at Corunna. Temporarily, until Dr. Camper completes some special work at the University of Michigan, the office is in charge of Dr. E. V. Thiehoff, assistant director of the Bureau of Local Health Services. Shiawassee is the sixty-third county to establish full-time public health service.

## MARKED DECREASE IN SMALLPOX

Smallpox cases reported in 1939 totaled 371, the highest annual figure in seven years. In 1940, the number of reported cases dropped below 100 for the first time since 1936, the total being 78. Nearly half of the 1940 cases were reported in the last two months of the year when 21 cases were reported in November and December from Highland Park and 15 for the two months from Detroit.

## CRIPPLED CHILDREN*

. . . According to reliable figures there are 7,000 crippled and more than 20,000 afflicted children in Michigan who need immediate care. Economic and medical investigations show that they must look to their state government for urgently needed medical help—yes, they are looking to us during this session of the Legislature hoping their prayers will not be denied.

I urge this Legislature to take immediate action to provide needed funds to assist these children. I am advised that these funds may have to take the form of a deficiency appropriation. I do not hesitate to recommend such a course.

It is sound economy to rehabilitate these helpless young people, through medical care or hospitalization, so they may become useful and self-supporting members of society. Neglected they will remain permanent state charges.

During the lifetime of the Crippled Children's Commission since 1927, some 8,000 children have had physical deficiencies corrected, and have been given vocational training. Latest reports show that they are earning an average of $18.35 per week, and their total yearly income is $7,008,000.

Experience of the last two years has proved that the formula now used for distributing this type of state aid is cruelly unjust. This formula specifies that 75 per cent of the funds shall be distributed to the counties on the basis of population and 25 per cent on the basis of need. Monthly expenditures by the counties are budgeted in advance and set at a fixed sum.

The fallacies of this plan were accentuated by the severe outbreak of infantile paralysis in 1940, which struck concentrated blows in many counties, while others escaped with only a few cases. Moreover, the disease wrought its worst havoc in several cases in counties least able to pay.

To correct this unjust and inequitable condition, I call to your attention the necessity for amending Act No. 283, Public Acts of 1939, so that appropriations for crippled and afflicted children will be distributed solely on the basis of need. This is recommended by those familiar with this problem and I cannot urge you too strongly to give favorable consideration to this revision.

The Act should be further revised to simplify its language eliminating all detailed provisions which make it difficult to administer and which properly should be left to the discretion of the Commission. These revisions would be helpful in bringing additional Federal funds to Michigan for this important part of our social program.

Formation of committees to provide medical and economic filters to coöperate with judges of probate is considered a progressive step. Every necessary measure must be taken to improve the administration of this Act.

*Message to the Legislature by Gov. Murray D. Van Wagoner, reprinted from the *Journal of the House of Representatives of Michigan*, Session of 1941, Journal Number II.

# ✶ COUNTY AND PERSONAL ACTIVITIES ✶

*President P. R. Urmston* announces the appointment of Edgar H. Norris, M.D., and Ralph H. Pino, M.D., Detroit, to the Postgraduate Medical Education Committee of the State Society.

* * *

*The Northern Tri-State Medical Association* will hold its 1941 meeting in Tiffin, Ohio, on April 8. Further announcement and program will appear in the March issue of THE JOURNAL.

* * *

*Robert S. Breakey, M.D.,* Lansing, addressed the Shiawassee County Medical Society in Owosso on Thursday, January 16, on the subject "Modern Urology, Diagnosis and Treatment."

* * *

*Reed M. Nesbit, M.D.,* and *Rigdon K. Ratliff, M.D.,* Ann Arbor, are the co-authors of "Hypertension Associated with Unilateral Renal Disease" which appeared in *The Journal of the American Medical Association,* issue of January 18, 1941.

* * *

*St. Mary's Hospital,* Detroit, will hold its annual Clinic Day on March 20. The conferences will be presided over by Frederick Coller, M.D., Ann Arbor; C. G. Johnston, M.D., J. P. Pratt, M.D., Detroit, and other outstanding medical men.

* * *

*Martha Longstreet,* M.D., Saginaw, was recently chosen by the Saginaw Board of Commerce as the "outstanding Saginaw citizen of the year," the first woman to receive the honor in the history of the award which was first given in 1922. Congratulations, Doctor Longstreet!

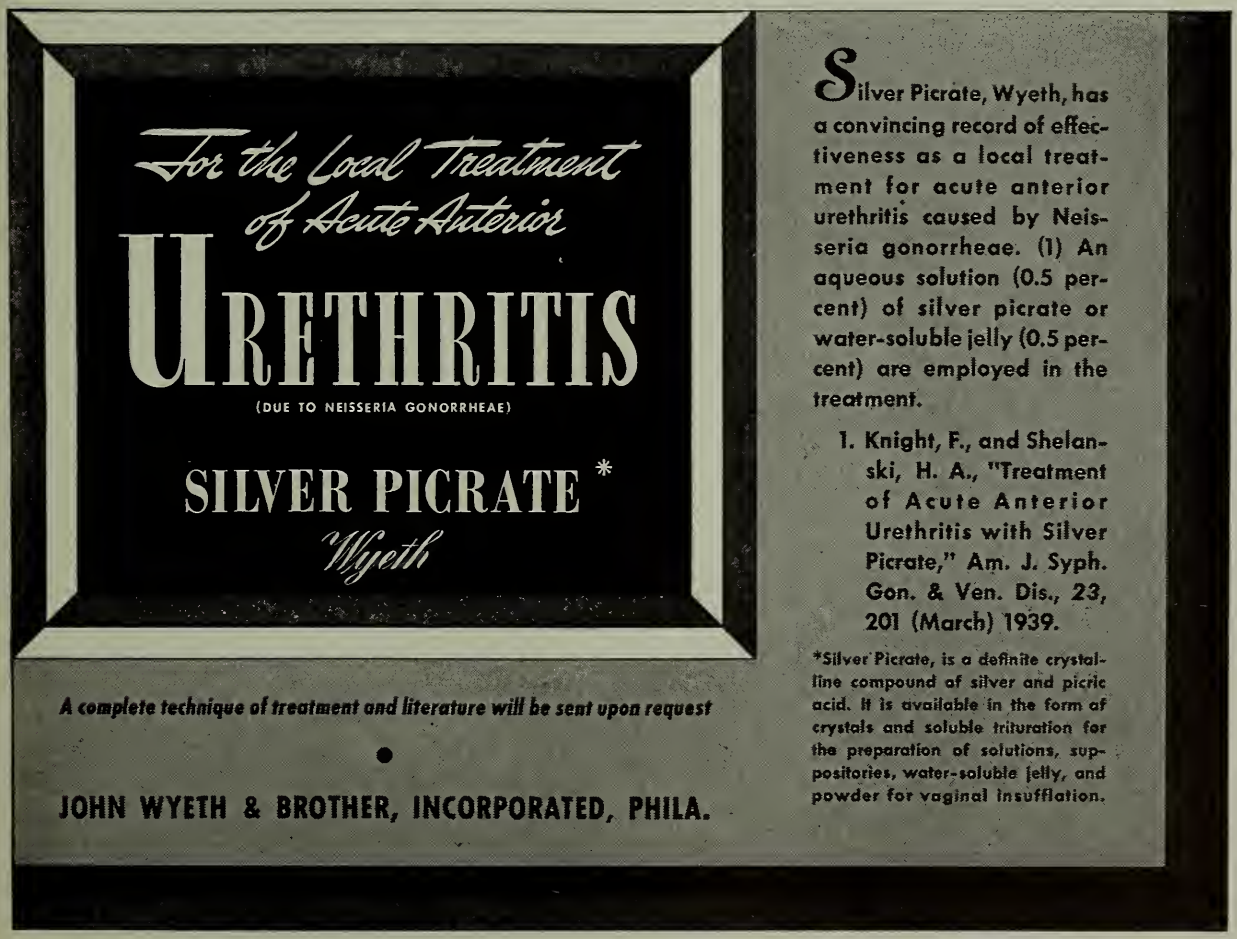
* * *

*Leo M. Ford, J.D.,* author of the article "Keeping Complete Written Records" which appeared in the January, MSMS JOURNAL, is attorney for the Medical Protective Company of Fort Wayne, Indiana. This article was third in a series of authoritative discussions on medical problems written by Mr. Ford for the MSMS JOURNAL.

* * *

*The Radio Committee* of the MSMS advises that the following Health Talks were broadcast over radio station CKLW:

Saturday, January 11, 1941—"Diabetes" by Geo. C. Thosteson, M.D., Detroit
Saturday, January 18, 1941—"Relationship of Dentistry and Medicine" by Horton D. Kimball, D.D.S., Detroit
Saturday, January 25, 1941—"Artificial Fever Therapy" by Donald Francis, M.D., Detroit

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*The Van Meter Prize Award* is offered by the American Association for the Study of Goiter, consisting of $300 and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The essays may cover either clinical or research investigations, should not exceed 3,000 words, should be typewritten, double spaced, and sent to Dr. W. Blair Mosser, 133 Biddle Street, Kane, Pennsylvania, not later than April 1, 1941.

* * *

*The International College of Surgeons* will hold its Fifth International Assembly in Mexico City, August 10 to 14, 1941. Surgeons in the United States desiring information about the presentation of papers or scientific exhibits are requested to write Dr. Desiderio Roman, Chairman of the Scientific Committee, 250 S. 17th Street, Philadelphia. For travel information, communicate with Dr. Max Thorek, 850 W. Irving Park Blvd., Chicago.

* * *

*Doctor,* remember your particular friends, the exhibitors, at your annual convention, when you have need of equipment, appliances, medical supplies, and service. Here are ten more of the firms which helped make the 1940 convention such a success:

Petrolagar Laboratories, Inc., Chicago
Pet Milk Sales Corporation, St. Louis
The Pelton & Crane Company, Detroit
Parke, Davis & Company, Detroit
The Muller Laboratories, Baltimore
C. V. Mosby Company, St. Louis
Michigan Medical Service-Michigan Hospital Service, Detroit
The Wm. S. Merrell Company, Cincinnati
Merck & Company, Inc., Rahway, New Jersey
The Mennen Company, Newark, New Jersey

* * *

*The Council* of the Wayne County Medical Society approved the recommendation of the Military Affairs Committee that a Medical Mobilization Committee be appointed to make surveys and plans for any eventuality in case of a national emergency. The Military Affairs Committee stressed the fact that Detroit is the center of the National Rearmament program and there is more likelihood of sabotage in the large industrial establishments, which if struck by fire or explosion would tax the facilities existing for medical care of those who might be wounded. In case of war, Detroit would be one of the first targets of the enemy's bombing planes. The Mobilization Committee is to study plans for rapid mobilization of the medical forces, as well as the obtaining of supplies, the care of the injured, education of the public with regard to public health problems which air raids or other catastrophes might bring and other problems of medical mobilization.

* * *

*The Selective Service Headquarters,* Washington, D. C., recently announced the appointment of Leonard G. Rowntree, M.D., as Chief of the Medical Division of the Selective Service System with the rank of Colonel of the Medical Corps.

In announcing the appointment of Dr. Rowntree, C. A. Dykstra, the Director of Selective Service, said, "We are fortunate to have such an experienced executive and widely known medical authority in charge of this significant phase of the Selective Service program. Dr. Rowntree's work at Johns Hopkins Hospital and the Mayo Clinic, and his service in France during the



*Say you saw it in the Journal of the Michigan State Medical Society*

World War of 1917, make him highly qualified for his difficult duties." Thus one of the most prominent medical men in the United States and a veteran of the World War is again in active service heading the medical profession of this country in making its contribution to National Defense.

* * *

## COUNCIL AND COMMITTEE MEETINGS

1. *Sunday, December 29, 1940.*—3:00 p. m.—Special Committee on NYA Health Program, Hotel Olds, Lansing.
2. *Monday, January 6, 1941*—6:30 p. m.—Cancer Committee—Woman's League Bldg., Ann Arbor.
3. *Wednesday, January 8, 1941*—6:00 p. m.—Insurance Drafting Committee—Hotel Statler, Detroit.
4. *Thursday, January 9, 1941*—6:00 p. m.—Preventive Medicine Committee—Wardell Hotel, Detroit.
5. *Thursday, January 16, 1941*—5:30 p. m.—Mental Hygiene Committee—Eloise Hospital, Eloise.
6. *Sunday, January 19, 1941*—3:00 p. m.—Syphilis Control Committee—Hotel Olds, Lansing.
7. *Sunday, January 19, 1941*—4:30 p. m.—Afflicted Child Committee—Hotel Olds, Lansing.
8. *Friday, January 24, 1941*—12:00 noon—Maternal Health Committee—Hotel Statler, Detroit.
9. *Wednesday, January 29, 1941*—12:15 p. m.—Postgraduate Medical Education Committee—University Hospital, Ann Arbor.

* * *

## COUNTY MEDICAL SOCIETY MEETINGS

*Allegan*—Tuesday, December 3, 1940—Allegan Health Center, Allegan—Annual Meeting—Election of Officers.

*Alpena-Alcona-Presque Isle*—Thursday, December 19, 1940—Annual Meeting, Election of Officers.

*Bay-Arenac-Iosco*—Wednesday, January 15, 1941—Bay City—Speaker: Donald C. Beaver, M.D., Detroit. Subject: "Gynecological Pathology."

*Calhoun*—Tuesday, January 7, 1941—Battle Creek—Speaker: Norman Miller, M.D., Ann Arbor. Subject: "Obstetric and Gynecologic Problems."

*Delta-Schoolcraft*—Wednesday, December 4, 1940—Escanaba—Annual Meeting, Election of Officers.

*Dickinson-Iron*—Thursday, January 2, 1941—Iron Mountain—Speakers: Drs. Boyce, Smith and Andersen.

*Grand Traverse-Leelanau-Benzie*—Tuesday, December 3, 1940—Annual Meeting, Election of Officers—Speakers: Frank Bethel, M.D., and John Sheldon, M.D., Ann Arbor.

*Hillsdale*—Thursday, January 16, 1941—Jackson—Met with other socities of Second Councilor District.

*Ingham*—Tuesday, January 21, 1941—Lansing—Annual President's Dinner—Speaker: Mr. John Bugas, Director of the Federal Bureau of Investigation for the Michigan District.

*Jackson*—Thursday, January 16, 1941—Jackson—Host to Second Councilor District Meeting.

*Kalamazoo*—Tuesday, January 21, 1941—Kalamazoo—Speaker: Frederick Coller, M.D., Ann Arbor. Subject: "Surgical Treatment of Peptic Ulcer."


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*Kent*—Tuesday, January 14, 1941—Grand Rapids—Program: "Studies in Human Fertility."

*Manistee*—Monday, December 23, 1940—Manistee—Annual Meeting—Election of officers.

*Muskegon*—Friday, January 17, 1941—Muskegon—Gonadogen Sound Film.

*Medical Society of North Central Counties*—Wednesday, December 18, 1940—Roscommon—Annual Meeting, Election of Officers.

*Oakland*—Wednesday, January 8, 1941—Rotunda Inn, Pine Lake—Host to 15th Councilor District Meeting.

*Ottawa*—Friday, January 10, 1941—Grand Haven—Speaker: Florian E. Schmidt, M.D., showed film on "Post-Encephaletic Parkinsonism with Bella-Bulgarian Treatment."

Tuesday, January 14, 1941—Holland—Speaker: T. E. Gibson, M.D., Lansing—Subject: "Venereal Diseases."

*St. Clair*—Tuesday, January 14, 1941—Port Huron—Speaker: Luther Leader, M.D., Detroit—Subject: "Surgical Lesions of the Colon."

*St. Joseph*—Thursday, January 9, 1941—Three Rivers—Speaker: Langdon Crane, M.D., Highland Park—Subject: "Newer Treatments of Pneumonia."

Thursday, February 13, 1941—Sturgis—Speaker: Warren E. Wheeler, M.D., Lansing—Pediatric subject.

*Shiawassee*—Thursday, January 16, 1941—Owosso—Speaker: Robert S. Breakey, M.D., Lansing—Subject: "Diagnosis and Treatment in Modern Urology."

*Washtenaw*—Tuesday, January 14, 1941—Ann Arbor—Clinical Pathological Conference conducted by Carl V. Weller, M.D., Ann Arbor.

*Wayne*—Monday, January 13, 1941—Detroit—Speaker: Albert M. Snell, M.D., Rochester, Minnesota—Subject: "Some Recent Studies on Hepatic Disease."

Monday, January 20, Detroit—General Practice Meeting. Symposium on Pneumonia.

Monday, January 27—Detroit—Speaker: Gilbert Horax, M.D., Boston—Subject: "Neurosurgical Procedures for the Relief of Pain."

Monday, February 3 and 10—Detroit—Speaker: Armand Quick, M.D., Milwaukee Beaumont Lectures.

Monday, February 17—Detroit—Speaker: Ashley A. Weech, M.D., New York—Subject: "The Physical and Cerebral Developments of Normal Children."

Monday, February 24—Detroit—Speaker: James Barrett Brown, M.D., St. Louis—Subject: "Limitatoins and Possibilities in Reconstructive Surgery."

*West Side* (Wayne County)—Wednesday, January 15, 1941—Speaker: I. F. E. Schmidt, M.D., Chicago—Movie on Treatment of Pneumonia and on Treatment of Encephalitis.

* * *

## NEW COUNTY MEDICAL SOCIETY OFFICERS

**Alpena-Alcona-Presque Isle**

President—H. J. Burkholder, M.D., Alpena
Vice President—E. A. Hier, M.D., Alpena
Secretary-Treasurer—Harold Kessler, M.D., Alpena
Delegate—W. E. Nesbitt, M.D., Alpena
Alternate Delegate—A. R. Miller, M.D., Harrisville

**Barry**

President—C. A. E. Lund, M.D., Middleville
Secretary—A. B. Gwinn, M.D., Hastings

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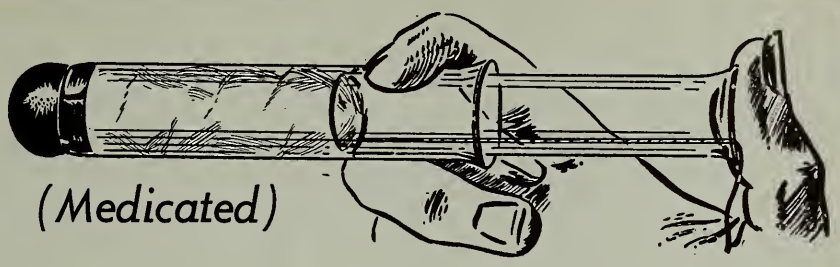

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Secretary—Horace Wray Porter, M.D., Jackson
Treasurer—John B. Holst, M.D., Jackson
Board of Directors—R. H. Alter, M.D., Jackson—term expires 1943
G. R. Bullen, M.D., Jackson—term expires 1942
J. D. VanSchoick, M.D., Hanover—term expires 1941

**Kalamazoo**
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Treasurer—Carl Wagar, M.D., Kalamazoo
Delegates—I. W. Brown, M.D., Kalamazoo—1941
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# In Memoriam

**A Testimony to Dr. J. G. Huizinga**

We, the members of the Ottawa County Medical Association, realizing that in the passing of Dr. J. G. Huizinga we have lost a capable, highly respected member, do hereby testify that, as a colleague he was aggressive, but always honest and loyal to his profession; as a citizen, he was conservative, but always ready to help along in any worthy cause, and to support civic improvements; as a man, he stood fearlessly and courageously for what he thought was right, but always tolerant and reasonable.

We sincerely regret to miss him from our membership roll, but trust that we shall in the future as in the past, derive benefit from his having been one of us.

In token of our high regard for our departed colleague, we request our secretary to have this testimony published in our State JOURNAL, and to send a copy to the family and incorporate in our minutes.

Your committee,

A. LEENHOUTS, M.D., *Chairman*
O. VAN DER VELDE, M.D.
R. NICHOLS, M.D.

# LETTER TO THE EDITOR

My dear Editor:

I thought possibly this small piece of work might be of interest to the general medical men as well as the Nose and Throat men.

This patient was operated upon by me for a tonsillectomy under local anesthetic and returned to her home in Detroit four or five days later. A slight cold was present before complete recovery and this article was sent as a result. I think this is rather clever and thought some of the other men might enjoy it too.

C. M. M.

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## THREE-QUARTERS OF A CENTURY FOR PARKE, DAVIS & COMPANY

The year 1941 marks the Diamond Anniversary of the founding of Parke, Davis & Company, a firm which had its inception in a small drug store in the City of Detroit, Michigan, and which, during the past seventy-five years, has become the world's largest makers of pharmaceutical and biological products.

From the very beginning, back in 1866, Parke, Davis & Company has engaged in research work with the object of making available to pharmacists and physicians, medicinal preparations of the highest degree of accuracy.

In the early 70's, pharmaceutical progress meant the discovery of new vegetable drugs. Energetic—and extensive—explorations gave to the medical profession such valuable and widely used drugs as Cascara and Coca. Then, in 1879, came one of Park, Davis' greatest contributions to pharmacy and medicine— the introduction of the first chemically standardized extract known to pharmacy. Desiccated Thyroid Gland, the first endocrine product supplied by the Company, was introduced in 1893. One year later, Parke, Davis established the first commercial biological laboratory in the United States. In 1897 came the introduction of the first physiologically assayed and standardized extracts. And throughout these early years, the fundamental Parke, Davis policy—precision in pharmaceutical manufacture—was crystallizing.

Since the turn of the century, progress of the Company has continued apace. An aggressive program of research has been zealously pursued, marked by the introduction of many important medicinal products. Diversified research activities cover the major phases of medical treatment—including the endocrine, biological, vitamin, and chemotherapeutic—and new discoveries are carefully evaluated through the Company's extensive facilities for clinical investigation.

The Company's home offices and research and manufacturing laboratories in Detroit occupy six city blocks on the Detroit Riverfront, adjacent to the Detroit-Walkerville ferry, which connects the City of Detroit with the Province of Ontario, Canada.

A beautiful farm of 700 acres, known as Parkedale and located near Rochester, Michigan, about thirty miles from Detroit, is utilized for the production of antitoxins, serums and vaccines, and for the cultivation of medicinal plants.

In addition to its Detroit headquarters, branches and depots are maintained in important cities throughout this country, and the world.

## STATUS OF THE MEAD JOHNSON VITAMIN A AWARD

Meeting in New York, June 4, 1937, the Judges stated that the presentation of the Award "at this time is not warranted since no clinical investigation on vitamin A has yet been published which completely answers any of the objectives of the original proposal. The Judges, therefore, agreed to defer further consideration of the granting of this award until December 31, 1939. This action was taken because of the existence of pronounced differences of opinion among investigators as to the reliability of any method yet proposed for determining the actual vitamin A requirements."

On November 19, 1940, the Judges met at Memphis and stated that "considerable progress in research with vitamin A has been made, principally along two main lines of endeavor. The fields showing most promise are those involving dark adaptation and blood serum studies. The Judges feel that there is still too much

uncertainty about the relative merits of several investigations to warrant making the award at this time. It was, therefore, agreed that the giving of the award be postponed until clear resolution of various factors is achieved."

The sum of $15,000, called for by the Main Award, remains as a cash deposit in escrow with the Continental Illinois National Bank and Trust Company of Chicago, and will be paid immediately upon official notification of the Judges' decision.

The Judges are: Isaac A. Abt, Chicago; K. D. Blackfan, Boston; Alan Brown, Toronto, Canada; Horton R. Casparis, Nashville; S. W. Clausen, Rochester, N. Y.; H. F. Helmholz, Rochester, Minn.; E. V. McCollum, Baltimore; L. T. Royster, Charlottesville, Virginia; Robert A. Strong, New Orleans, La.

## THE DOCTOR'S LIBRARY

*Acknowledgement of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

CLINICAL PELLAGRA. By Seale Harris, M.D., Professor Emeritus of Medicine, University of Alabama, Birmingham, Alabama. Assisted by Seale Harris, Jr., M.D., formerly Assistant Professor of Medicine, Vanderbilt University, Birmingham, Alabama. With foreword by E. V. McCollum, Ph.D., Sc.D., LL.D., Professor of Biochemistry, School of Hygiene and Public Health, The Johns Hopkins University, Baltimore, Maryland. Illustrated. St. Louis: The C. V. Mosby Company, 1941. Price: $7.00.

The increased interest in vitamin deficiencies makes this study, that of the earliest of American deficiency diseases, of great value. While its primary importance is, of course, to the physicians of the South, sufficient sub-clinical pellagra is seen by the northern physician to make this monograph well worth while. McCollum says, "The title hardly does justice to the book. It is a philosophic treatment of clinical and experimental data of many kinds, interpreted by many able workers who contributed to the development of our knowledge of the biochemistry of nutrition * * * ."

---

METHODS OF TREATMENT. By Logan Clendening, M.D., Clinical Professor of Medicine, Medical Department of the University of Kansas; Attending Physician, University of Kansas Hospitals; and Edward H. Hashinger, A.B., M.D., Clinical Professor of Medicine, Medical Department of the University of Kansas; Attending Physician, University of Kansas Hospitals; Attending Physician, St. Luke's Hospital, Kansas City, Mo. With chapters on special subjects by J. B. Cowherd, M.D.; Leland F. Glaser, M.D., Thomas B. Hall, M.D.; John S. Knight, M.D.; H. P. Kuhn, M.D.; Paul H. Lorhan, M.D.; F. C. Neff, M.D.; Don Carlos Peete, M.D.; Carl O. Rickter, M.G.; E. H. Skinner, M.D.; O. R. Withers, M.D.; and Lawrence E. Wood, M.D. Seventh Edition. St. Louis: The C. V. Mosby Company, 1941. Price: $10.00.

This is the seventh edition of a book first published in 1924. In this edition new sections have been added on the uses of sulfanilamide, backaches, peripheral vascular diseases, deficiency diseases and anesthetics. Clendening's manner of considering the history and general conception of the disease in a very condensed

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form and then following by describing the treatment in detail with the results which the physician may expect, makes the volume very desirable to any practitioner of medicine. Discussions are concise and yet completely sufficient.

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THE 1940 YEAR BOOK OF INDUSTRIAL AND ORTHOPEDIC SURGERY. Edited by Charles F. Painter, M.D., Orthopedic Surgeon to the Massachusetts Women's Hospital and Beth Israel Hospital, Boston. Chicago: The Year Book Publishers, Inc., 1940. Price: $3.00.

This is a 484-page review of the late literature on traumatic surgery and orthopedic procedures. A symposium on arthritis is the highlight and really worth reading. The present interest in traumatic surgery due to the war makes this Year Book of interest to many surgeons.

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FOREIGN BODIES LEFT IN THE ABDOMEN. The Surgical Problems—Cases, Treatment, Prevention. The Legal Problems—Cases, Decisions, Responsibilities. By Harry Sturgeon Crossen, M.D., School of Medicine, Washington University; and David Frederic Crossen, LL.B., School of Law, Washington University, St. Louis, Mo. With 212 illustrations including 4 color plates. St. Louis: The C. V. Mosby Company, 1940. Price: $10.00.

The Crossens have combined, to include in one volume, the surgical problems and the legal problems. There is probably no surgeon who at one time or another has not either left a foreign body in the abdomen or feared that he has. For that reason this very inclusive book is of great value to any surgeon. It is indispensable to the surgeon or roentgenologist.

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THE 1940 YEAR BOOK OF PATHOLOGY AND IMMUNOLOGY. Pathology edited by Howard T. Karsner, M.D., Professor of Pathology, Director of the Institute of Pathology, Western Reserve University, Cleveland. Immunology edited by Sanford B. Hooker, A.M., M.D., Professor of Immunology, Boston University School of Medicine; Member, Evans Memorial for Clinical Research and Preventive Medicine; Immunologist, Massachusetts Memorial Hospitals. Chicago: The Year Book Publishers, Inc., 1940. Price: $3.00.

This is the first year book for the laboratory physician and reviews the current literature for this group as well as for other specialists who are interested in the new developments of the fundamental sciences relating to their specialties. Sanford B. Hooker is one of the pioneers of immunology and his concise pointed comments are most practical.

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"The function of this Committee is to control, in so far as is possible, those conditions that are sources of inefficiency and losses of time which arise out of ill health," Dr. Selby stated at the first meeting of the Industrial Medicine Subcommittee of the Council of National Defense held recently at the United States Public Health Service.

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The JOURNAL
of the Michigan State Medical Society
Issued Monthly Under the Direction of the Council
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# Self-Inflicted Injuries in Civil Practice*

By Deryl Hart, M.D.
Durham, North Carolina

J. Deryl Hart, M.D.
*Professor of Surgery, Duke University, School of Medicine; in Charge of Surgical Department, Duke Hospital, Durham, North Carolina. Author of numerous medical publications.*

■ Self-inflicted injuries are seen by general practitioner and specialist alike and are probably more frequent in occurrence than is generally suspected. This statement is based on the fact that most of the cases seen by me have been under observation either in a hospital or in the home for from a few weeks to several months or years before they have come under my care. In most cases the diagnosis has not been suspected or made, primarily because it has not been considered. The safest rule is to mistrust any patient who has a lesion which fails to heal when given appropriate treatment. This presupposes proper consideration of the underlying pathology, such as sinus tracts, fistulæ, improper drainage, anaërobic, tuberculous or fungus infections, etc.

No consideration will be given to the relatively common major psychic disturbances which lead to self-injury or attempts at self-destruction. I will also omit any consideration of injuries inflicted to avoid liability for military duty since I have had no experience with them. Only two cases will be presented in which financial gain played a rôle. The other patients reported may have received a gain in the form of sympathy, relief from unpleasant duties, or satisfaction in mystifying or confounding their relatives, friends, or physician. Some were evidently feebleminded, while others were at the age of puberty at which time they may be more subject to mental strain. The principal interest in this presentation lies in the individual case reports so further discussion will be reserved until after these are given.

*Case 1.*—The patient, a seventeen-year-old white girl, was admitted to Duke Hospital on September 13, 1937, complaining of bilateral axillary "boils" which had been present for the past two years.

In the summer of 1935 a large "boil" near the right axilla was incised and healed promptly. In November of the same year another "boil" appeared in the left axilla and since that time the patient has never been free of "boils" under both arms.

The general examination was negative except for the manner of the patient, who was shy and retiring. In both axillæ were numerous old scars and sinus tracts from previous "infections" and incisions. Several of these sinuses were draining a slight amount of pus, but there was no evidence of an acute inflammatory reaction.

All laboratory studies were negative except for cultures which showed only the Staphylococcus aureus. It was impossible to find any evidence of tubercle bacilli, fungi, or anaërobic organisms.

The draining sinus tracts were laid open and the granulation tissue curetted out. Pathological studies showed only a chronic inflammatory reaction. At this time it was noted that there were subcutaneous fistulæ lined with epithelium beneath each breast (Fig. 1). The patient had given no history of any "infection" in this location and had not confided their presence to her mother, who brought her to the hospital and

*From the Department of Surgery, Duke University School of Medicine, and Duke Hospital, Durham, North Carolina.

who was familiar with the recurring lesions in each axilla. On questioning she admitted that she had had lesions beneath the breasts similar to those in the axillæ. In the axillæ there were likewise numerous fistulous tracts which were apparently lined by epithelium and from which there was no drainage (Figs. 2 and 3). In view of the symmetry and the appearance of these lesions it was suspected that the patient had inflicted them. We hoped that we could apply dressings so as to make these lesions inaccessible and obtain healing without having the patient confined to the hospital.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

During the next two and a half months every effort was made to obtain healing by incision, curettage, adequate drainage, and attempts to apply dressings which would make the wounds inaccessible. The arms were bandaged tightly against the side, with pads in the axillæ but healing could not be obtained. The patient's condition was then discussed frankly with her family, who had a sympathetic and understanding attitude, and she was brought into the hospital to be kept under close observation until satisfactory results could be obtained. Under general anesthesia all the epithelialized tunnels beneath the skin in the left axilla were opened up (Fig. 3). The granulating areas were again laid open, and curetted or excised (Fig. 4). The area was treated with compresses of physiological salt solution and six days later the larger granulating area was covered with pinch grafts.

Sixteen days after the first operation the lesions beneath the breasts and in the right axilla were treated in a similar manner. In the meantime, a new draining sinus had developed in the right axilla while she was having treatment for the left side and there was also evidence that she had been tampering with the skin grafts, so while she was under general anesthesia a plaster of Paris cast was applied to her trunk and both arms, fixing her in a double "Statue of Liberty" position. Healing then progressed rapidly, and within twelve days all areas had healed.

The patient was very desirous of going to visit an aunt and was given permission to do so but in her presence instructions were given that under any condition the aunt or the mother should inspect the axillæ and breasts daily and at the slightest sign of any return of the condition she was to be returned to the hospital immediately so that she could again be placed in a cast with the arms extended.

The patient has remained well since these instructions were given.

*Case 2.*—The patient, an eighteen-year-old white married woman, was admitted to the Duke Hospital on April 22, 1940, complaining of "dry gangrene of the hand." The family history was negative except that five out of fourteen brothers and sisters had died in infancy.

The present illness began nine days before admission at which time she received a finger nail scratch on the dorsum of the right hand. The wound did not seem to be infected, but three days later a darkened area appeared at the site of the injury. This had increased in size, particularly during the preceding two days, and was accompanied by tenderness and swelling of the hand, general malaise, anorexia, slight fever, and, on two occasions, chills. The wound had been debrided and treated by her family physician.

Examination revealed nothing of importance other than the lesion on the right hand. Over the radial surface of the dorsum was a black gangrenous area measuring approximately 3 cm. in diameter and about which there was no gross inflammatory reaction. There was no enlargement of the adjacent lymph nodes. Motion of the fingers was somewhat limited. The white blood count was 9,800 and the hemoglobin was 90 per cent.

*Treatment.*—The black eschar was removed at the time of admission. The base of the ulcer was black, the tendons were exposed, and several exposed veins were thrombosed (Fig. 5). During the patient's eleven-day stay in the hospital under treatment with hot saline compresses and application of zinc peroxide the ulcer cleared up rapidly, the slough separated, leaving a healthy granulating base. Repeated anaërobic and aërobic cultures showed only occasional staphylococci.

After treatment for eleven days, and just before skin grafting was to be carried out, the patient left the hospital against advice. She stated that she would return home and talk to her physician and come back within one week for skin grafting of the area. She has not been seen since that time.

*Case 3.*—A white girl, fourteen years of age, was brought to the hospital because of "sores" on the legs, arms, and head. Two months before entry a black spot appeared on the left shin and with sloughing 12 by 7 cms. with a definite growth of epithelium at the margin and in areas in the base. No specific cause to account for the persistence of the lesion could be demonstrated. After repeated questionings the patient

Fig. 5.

Fig. 6.

Fig. 7.

Fig. 8.

of the necrotic skin an ulcer formed. During the interval prior to admission similar lesions developed on the dorsum of the left foot, on the scalp and on both wrists. The family physician sent the patient to the hospital because he was unable to determine the cause of the lesions.

The patient was shy and uncommunicative except that she enjoyed exhibiting the ulcers and telling how she knew in advance when and where each was going to appear. There were numerous ulcers or areas of skin gangrene, some of which are shown in Figures 6, 7 and 8. The remainder of the physical examination and the laboratory examinations were negative.

Further inquiry revealed the fact that the patient had been allowed to ride to school because of the appearance of the lesions on the foot and later was excused from writing when the black spots appeared on the wrists. As the "disease" seemed to spread she was released more and more from duties about the house and farm. Although she strongly denied that the lesions were self-inflicted, the family stated that she had access to the lye used in making the household soap, and no new areas appeared while she was in the hospital. With the application of saline dressings the necrotic skin separated and the ulcers healed by second intention. No new spots had developed three years after her discharge from the hospital.

*Case 4.*—The patient, a white girl, eleven years of age, had developed a blister on the inner aspect of the right foot ten months before admission. Following this an ulcer formed, which grew progressively larger, although it received treatment which should have resulted in healing.

Examination revealed a shy, uncoöperative white girl in good physical condition. On the medial aspect of the right foot there was a shallow ulcer measuring finally admitted she had kept the ulcer from healing by picking it. Her parents were informed of the situation and after obtaining their coöperation the ulcer healed within a week.

*Case 5.*—The patient was an unintelligent female mill worker twenty years of age who, over a period of ten years, had developed recurrent areas of skin gangrene. She had failed repeatedly in school and had advanced only to the fourth grade after seven years' attendance.

During the examination she feigned unconsciousness, performed athetoid movements, and was apparently insensible to stimuli, although when she thought she was not being watched she returned to "normal." There were many scars and areas of skin gangrene on the face and extremities.* The remainder of the examination and the laboratory studies were negative.

Under treatment healing was rapid. Her family physician reported that she remained well for only two months, after which time the ulcers reappeared.

*Case 6.*—A white woman, thirty years of age, was sent to the hospital from a county home because of a "sore" on the left foot which, three weeks before entry, had developed as an area of skin gangrene. Two years before she had feigned a bloody discharge from her ear by taking blood obtained from her gums and placing it in the external auditory canal so her physician now suspected her of malingering.

The patient was a poorly developed, mentally deficient white woman. On the dorsum of the left foot were five round areas of skin necrosis with little peripheral reaction. When she was seen on her second visit three

*For illustrations of this and other cases see "Self-Inflicted Injuries in Civil Practice," Deryl Hart, M.D., and Randolph Jones, Jr., M.D., *The Southern Medical Journal*, 29:963-973, (October) 1936.

months later the original lesions were partly healed, but a new crop in various stages of development was present over the lower leg and on the face. The only treatment was the application of a plaster cast to

Fig. 9.

the leg, thus rendering the lesions there inaccessible. Six weeks later all ulcerations, including those on the face, had healed.

*Case 7.*—A white girl, nineteen years of age, was sent to the hospital by her surgeon because an appendectomy incision had failed to heal for four years after operation. The incision had healed *per primam* except for a small area at the upper end. Here a small ulcer formed, which gradually spread until the entire scar was involved. Diathermy, ultraviolet radiation, various applications, and seven operative procedures did not result in healing. Meanwhile, various hemostatic agents and other measures failed to control the intermittent bleeding from the ulcer.

Examination showed a childish, over-coöperative white girl who was quite obese but who otherwise was in good physical condition. In the scar of a low right para-rectus incision was a shallow ulcer 10 cm. long and 2 cm. wide. No sinus tracts could be discovered and the base was covered with healthy granulation tissue. Cultures from the wound produced only Staphyloccocus albus. The ulcer was treated with saline compresses for three days and then curetted under anesthesia and no sinus tracts were found. The tissue obtained showed on examination only a non-specific inflammatory reaction. At the time of operation the skin adjacent to the wound was painted with gentian violet and the patient placed in a body cast. Three days later when her fingers were found stained with the dye, the cast was extended downward to include the thighs and to make the wound completely inaccessible. A window was cut in the cast over the ulcer and pinch grafts were transplanted to the clean, granulating area. Within seventeen days after admission to the hospital the ulcer had healed (Fig. 9).

The patient, who could foretell bleeding from the wound, after being placed in the cast cried most of the time for forty-eight hours and sent repeated messages asking her family to come for her. Having failed to persuade them she suddenly appeared brighter and said, "I have a feeling that I am going to get well." Although no admission of self-inflicted irritation of the wound could be obtained, and against our advice that our opinion, known to the patient, be held over her as a means of securing her coöperation, the surgeon who had treated her for the four years told the family the cause of the failure to heal. She has remained well and we feel there is no doubt as to the cause of the non-healing.

*Case 8.*—A white man, twenty-one years of age, was seen because an appendectomy incision did not heal during a period of seven years, in spite of frequent dressings and six operations performed to obtain closure.

The patient was in excellent physical condition. In the lower portion of the scar of a McBurney incision was an ulcer 2.5 cms. in diameter. There was nothing about the appearance of the wound to account for its failure to heal and we concluded that it was being kept open.

The skin of the entire right lower quadrant and the ulcer were painted with gentian violet so that it was difficult to differentiate the ulcer from the surrounding skin. A large dressing was applied and sealed to the skin with collodion. Even by changing the dressing every two days it became progressively more difficult to keep the edges sealed. After ten days, when the ulcer was two-thirds healed, the patient appeared with the dressing detached along the lower border and reported that the "discharge" was much worse. He was shown that the "discharge" was dried blood and on removing the dressing his attention was called to six parallel tangential cuts in the skin, each approximately 2 cms. long, just below the ulcer, which itself still showed progressive healing. Since that time he has not been seen by either his surgeon or by me.

However, six years later a representative of the Federal Employment Agency came to seek my advice about a "most distressing case" of a young man who was very desirous of obtaining work and even then had temporary employment in the postoffice during the Christmas rush but could not work continuously because of an appendix wound of thirteen years' duration which had never healed. As she understood I had treated him she wanted my opinion and advice as to what could be done. She was told that reports on patients would not be given without the patient's consent, but that if she would come out with the patient I would be glad not only to go over his case in detail but could also probably assure her of obtaining healing if the patient could be placed under my care in the hospital for thirty days. Needless to say they did not come. However, the desired result was obtained for a year later I learned that the wound had healed, that the patient had a job and was supporting his mother.

*Case 9.*—The patient, a white man twenty-five years of age, came to the hospital because of an unhealed appendix wound of nine months' duration. He had been discharged from the hospital two weeks after the operation with the wound apparently healed but returned a week later, at which time it was open and draining pus. Since that time the unhealed area had increased gradually in size despite various types of treatment that had been used. At no time had there been any evidence of fecal drainage.

Examination showed a well developed man with normal hemoglobin, white blood count, pulse, temperature, and respirations, and presenting nothing of importance, except in the right lower quadrant of the abdomen where there was an oval ulcer measuring 10x20 cms., with a dirty granulating base, in the center of which was a large area of blackened necrotic tissue. There was no sinus tract and no evidence of undermining at the edges. The Wassermann reaction was negative.

Cultures of the wound showed only Staphylococcus albus and E. coli, with no fungi or anaërobic organisms.

After four days' treatment with compresses aided by excision of the necrotic slough, a clean granulating base was obtained. At this time, however, the patient refused further treatment and left the hospital against advice. His physician was told that the wound was in condition for skin grafting which would be necessary for early healing.

After thirty days the patient returned, giving the history that two weeks previously skin grafts had been applied by his physician. All the grafts had taken, both the grafted area and the donor area were healed.

There was moderate depression in the center of the grafted area. Below and medial to this grafted area there was a superficial ulceration measuring 4x3 cms. This was clean, with no sinus tract, no undermining of the edges, no tenderness in the surrounding tissues; and no signs of any intra-abdominal lesion. The patient was sent in by his physician for consultation only and has not been under our care since that time.

A recent letter from the patient's physician follows:

"The area where the blisters had occurred on the patient's wound were grafted after his return from Duke. This wound has healed completely except for one place about an eighth of an inch in diameter, but on his left leg, where I took the last grafts, he has developed an infection similar to the one he had in his right lower abdominal wall.

"I have kept continuous wet boric acid dressings to this wound which has progressively gotten worse. For the last three days I have applied 50 per cent ichthyol ointment which was the drug that I had used on his abdomen just before I sent him to Duke the first time. If you remember this patient also had an infection around both big toe nails. I removed the nails finally and kept wet boric acid dressings on these toes continuously but to no avail. Fifty per cent ichthyol ointment was applied to these toes for several days and then the wet boric acid again and the toes healed nicely."

Although the patient was never openly accused of inflicting the injuries, and was never asked by us to admit it, the course makes such a diagnosis highly probable.

*Case 10.*—The patient, a sixteen-year-old white female, came in with a complaint of nausea and vomiting which had been present for the past ten weeks.

The present illness began about 8 months before admission when she began having attacks of right lower quadrant pain, occasionally associated with nausea. These attacks increased in severity and in January, 1938, the appendix was removed. Following this operation there was a moderate bloody discharge from the wound and three weeks following operation she left the hospital without the wound being completely healed. One week later when she returned for a dressing the skin surrounding the incision was inflamed. After a period of two weeks, during which time the patient was ambulatory and the wound dressed daily, she was readmitted to the hospital since healing had not progressed satisfactorily. The skin about the incision, which had been inflamed when the patient returned to the hospital for dressings, developed blisters (Fig. 10). These blisters occurred before the patient received any ultraviolet radiation, and broke down with the discharge of a yellow material. In the hospital the wound was dressed two to three times a day and was treated with ultraviolet radiation. It was two and a half months after a simple appendectomy before the wound was completely healed. Following healing there was residual tenderness in the right lower quadrant. After all the lesions had healed (about two months before admission to the Duke Hospital) she began to have frequent attacks of vomiting, associated with some pain beneath the umbilicus and in the region of her operation. The vomiting, never associated with bleeding, had occurred immediately after meals and had been spontaneous without nausea. It had persisted except for one short interval and the pain beneath the umbilicus and at the operative site had been present constantly. There had been no distention, no abdominal masses, and she had lost no weight during this period.

Fig. 10.

Examination showed nothing of significance other than the abdomen, where on the surface was the scar from the appendectomy, measuring about 5 cms. in

length and 1 to 1.5 cms. in width. Scattered about this over most of the right lower quadrant (Fig. 10) were irregularly placed scars, some of which were discrete and well circumscribed while others were confluent. Deep palpation revealed some tenderness in the right lower quadrant, but otherwise the abdominal examination was negative. The hemoglobin was 90 per cent and the white blood count was 7,600.

Following admission to the hospital the patient, after being served milk and crackers, was noted to vomit only milk. The crackers had disappeared from her tray and the nurse discovered that she secreted these beneath her pillow and ate them at night. Gastro-intestinal studies were entirely normal. At this time it was learned that the patient had had a love affair and it was the opinion of her mother that this might have some bearing on her condition.

Psychotherapy, consisting of nothing by mouth, bilateral subcutaneous salt infusions, and frequent gastric lavages were tried with striking results.

Within eight days after treatment was started the patient was eating and retaining her diet. On the tenth day she was discharged, her condition being described as good, and her gastro-intestinal system seemingly functioning normally.

When seen ten weeks later she had had no nausea or vomiting, had been to the beach twice during the summer, and was enjoying life in general.

*Case 11.*—Another patient, who was not under my direct care, but who was seen by me, had an appendectomy incision which would not heal until she was placed in a plaster cast and the wound skin grafted. Then healing was rapid and she was discharged as cured. However, she was seen several years later, after having been in various hospitals throughout the country, and again had an open wound in the old scar.

*Case 12.*—This white woman,* thirty-five years of age, entered the hospital with the complaint of "Raynaud's disease." Her fingers had been removed piecemeal by numerous operations. Over the end of the fifth left metacarpal was a sharply demarcated area of gangrene. The radial pulse in both wrists was good and the hands appeared normal except for the lesion described and the mutilation of previous operations. Although the patient complained loudly of her unfortunate condition and of severe pain in the hand, she seemed quite comfortable when "off guard." She also insisted that amputation be done through the middle of the fifth metacarpal, saying that otherwise the wound would not heal.

The ulcer was excised, using nitrous oxide-oxygen anesthesia, and, after controlling the bleeding, which was profuse, the skin was closed and the entire hand and forearm placed in a plaster cast. After twelve days the cast was removed and primary healing had occurred. When the patient saw what had been done she cried almost continuously for twenty-four hours, giving no explanation except that we had "fooled" her. She has not been heard from since leaving the hospital.

*Case 13.*—A pupil nurse, twenty-three years of age, was admitted to the infirmary of another hospital because of a mild carbolic acid burn of the hand. The burn healed rapidly; however, she was kept under observation for six months and every conceivable examination made to discover why she had a continuous elevation of temperature (101 to 104° F.). Nothing could be found and she was eventually discharged with a diagnosis of "hyperpyrexia unexplained." We first saw her eighteen months later because of a peculiar "infection" about the nail of the left third finger. This failed to subside under treatment, and finally the nail was removed, followed only by temporary improvement. A week later, when she returned for her daily dressing, there was a fiery red discoloration of the dorsum of the hand which had somewhat the appearance of erysipelas.

The patient was then admitted to the hospital and the "infection" healed rapidly. Her temperature, however, remained elevated as at the time of her previous illness, until a house officer noted that her face was cool when her temperature, which had just been taken, was recorded as 103° F. Her temperature was immediately retaken by mouth, axillæ, and rectum, using four thermometers simultaneously, and the patient kept under close observation. All thermometers registered below 98.6° F. Thereafter she was closely watched when her temperature was taken and there was no subsequent elevation. Shortly after she left the hospital, having been dismissed from her training school as mentally unsuited for nursing, she wrote that the hand, which was healed at the time of her discharge, was again giving trouble.

*Case 14.*—An intelligent white woman, twenty-three years of age, entered the hospital complaining of a chronic infection about the nail of the right great toe. One year before entry, the entire nail had been removed ten days after the onset of an acute infection. Although the nail bed had been curetted twice in the interim and the matrix of the nail removed, the wound would not heal.

The physical examination was negative aside from a clean granulating ulcer occupying the position from which the nail had been removed (Fig. 11).

The ulcer was treated with compresses and then curetted. A dressing was applied to the toe and the foot and the leg was placed in a plaster cast. This was followed by prompt healing. Several weeks later the patient returned with a blister in the scar. She was told then that if this did not heal promptly, a shoe would be made with a lock; her sister with whom she lived would be given the key, and told the nature of her trouble. She never admitted keeping the wound open, yet it remained healed under the salutary threat of exposure.

*Case 15.*—A white man, thirty-one years of age, entered the out-patient clinic complaining of a "boil"

*Reported by permission of Dr. Dean Lewis.

on the back of his hand. Two years before a cigarette burn on the left wrist resulted in an infected pustule. Shortly afterward a crop of similar lesions appeared progressively on the arm. About the time these healed a red, raised area developed on the dorsum of the left hand, was incised, and drained only serosanguineous fluid. The "boil" had continued to exude bloody fluid intermittently until the patient's entry.

Examination showed the left arm to be pock-marked by numerous round, regular scars extending up to and stopping sharply at the shoulder. The "boil" on the dorsum of the left hand was a heaped up area of scar tissue with a small sinus in its center from which old blood exuded.

A bandage of Unna's paste was applied to the hand and forearm, and when this was removed three weeks later the "boil" had completely healed.

*Case 16.*—A white woman, twenty-seven years of age, was admitted to the hospital with the complaint of swelling and soreness of the right knee. Shortly after an attack of acute arthritis three years before entry, black and blue spots appeared over the right knee. The lesions had recurred and soreness in the joint had persisted at intervals until admission.

Examination showed several large swollen ecchymoses on the medial aspect of the knee joint which was held flexed at an angle of ten degrees until her attention was diverted, when it could be moved through a normal range of motion. Aside from slight atrophy of the right leg, the other findings were negative.

Shortly after admission, excessively dark circles under her eyes were found to be caused by coloring matter which could be wiped off. Meanwhile a new crop of purpuric spots appeared over the knee as the older areas faded. In spite of her objections, a plaster cast was applied to the extremity, and when, two weeks later, this was removed the lesions had disappeared completely. An unhappy home situation was admittedly the cause of many of the patient's complaints. After repeated conversations there was some improvement in her mental attitude and she left the hospital after seven weeks, improved and able to walk.

The two cases which follow belong to the group of purposeful malingerers who receive compensation for their disability.

*Case 17.*—A white female mill worker, twenty-nine years of age, was sent to the hospital by the State Industrial Commission because of "sores" on the left knee and stiffness of the joint. Ten months before she was supposedly bitten on the left knee by a "scorpion," which she described as being a small lizard. Shortly afterward, and in the interval until admission to the hospital, recurrent areas of skin gangrene had appeared about the knee and the joint had become stiff. During this time she had been receiving compensation for her disability.

Examination revealed circular and dumb-bell-shaped areas of skin gangrene over the left knee and lower thigh. All had well defined margins except for an occasional comma-like area of redness at their peripheries, where some liquid caustic had evidently been

Fig. 11.

spilled over on the skin and had been quickly wiped off. Numerous scars of former lesions were present. The knee was held stiff until the patient's attention was diverted, at which time the joint relaxed and could be moved five to ten degrees before she noticed the motion and again held it rigid.

Under a general anesthetic, the eschars were excised and the defects were skin grafted. With induction of the anesthesia she moved the "stiff" knee through a normal range of motion. After operation healing was rapid and the patient moved the knee freely. On discharge from the hospital all claims for compensation were dropped.

*Case 18.*—Two and a half years before entry to the hospital, this forty-year old white man stuck a nail in his foot. Shortly thereafter he developed a pustular eruption on the dorsum of his foot, which recurred periodically and for which he had been receiving disability benefits.

On examination an eruption was found over the dorsum of the foot, composed of pustules in all stages of development. Some of these when opened contained a small foreign body which proved to be a splinter. Many of these small spicules were removed in the presence of the patient and carefully preserved. The foot was thoroughly cleaned with alcohol and a plaster cast applied to include the foot and the leg.

Two weeks later, on removing the cast, the pustules had healed and their sites were represented by crusts. On removing these a small spicule was seen projecting from the under-surface of each. These likewise on removal were preserved. At the end of the final examination six weeks later the foot was entirely healed and the patient was told, in the presence of

an insurance representative, and with the bottle containing the spicules in front of him, that there was no relationship between the pustules and the injury received when he stuck a nail in his foot. He was also told that he was not entitled to further compensation. Following this he dropped his claim.

Over a year later I was called to testify before the North Carolina State Industrial Commission in regard to this patient, as he had had a return of the same symptoms and had requested that the case be reopened. In my testimony I emphasized the fact that his lesions had no relationship to the old puncture wound, but in the face of pointed questioning carefully avoided any statement that they were self-inflicted since this would be difficult for me to prove and might result in personal embarrassment. After the claim had been disallowed the Commissioner in a private conversation stated that he gathered from my testimony that I had an opinion about the man's condition which I was not willing to have written into the record, and asked if I would be willing to give it to him privately. When told that in my opinion the lesions were undoubtedly self-inflicted, he told me that the Commission had learned that five years previously the South Carolina Industrial Commission had found that the patient was drawing compensation for injuries which had been self-inflicted.

Patients with self-inflicted injuries and with their desire to conceal the true nature of the lesions and mystify the physician present problems in diagnosis and treatment which demand all the knowledge and experience and tax the ingenuity of the most adept. In the literature they have received attention from men in all branches of medicine, but as a group are seldom considered in textbooks except those on diseases of the skin. Even in our own hospital files it is impossible to locate the records of a number of similar cases since the diagnosis for some reason (such as a relative of the patient in the training school, or record room) was not complete. A considerable number of these presented were found only as a result of the good memory of members of the staff.

These lesions are far more common in adults than in children and are most common about the age of puberty, particularly in girls.

The most common lesion produced in the female is some form of dermatitis artefacta, while there are recorded instances of male patients who have produced a cellulitis by the injection of liquid feces, saliva, crude oil, turpentine, or metallic mercury. Granulomas have been produced by the injection of paraffin or camphor, herniæ by dilatation of the external ring, and rectal prolapse by the tearing of the sphincter muscle. Abscesses have formed following the insertion of thread, horsehair, or splinters beneath the skin, while one patient is reported to have forced a knitting needle from an appendectomy wound into the bladder. I know of one woman who had multiple sinuses which traversed the abdomen and thighs, produced by forcing a crochet hook beneath the skin. (Figs. 2 and 3 show lesions which also must have been produced in some such manner.)

The classification of the patients into groups should take into consideration the motive behind the act and the degree of insight the patient has into his or her psychological processes. No attempt will be made to classify our patients through many can be fitted into one of the following groups.

1. Those desiring to gain sympathy or attention or to evade unpleasant duties.
2. Adult malingerers who consciously mutilate themselves for personal gain as compensation or evasion of military duties.
3. Those who mutilate themselves in order to obtain a certain amount of perverted sexual gratification.
4. Hysterical patients, usually girls, with a subnormal intellect.
5. Patients with major psychoses who make no effort to evade the responsibility for the lesions being self-inflicted.

### Diagnosis

The diagnosis of conditions of this type depends primarily on ruling out organic disease and on maintaining a suspicious and inquisitive atttitude toward all patients with lesions of a questionable nature. To one who has seen several cases the estimation of the personality of the patient may be of great assistance. There is usually an ill-definable quality about their general reaction which is difficult to describe. They may be over-coöperative or too insistent that their trouble is of no consequence, and that they can return to their daily routine. The general appearance of frankness may be overdone and yet while apparently willing to tell everything, they may continually evade answering straightforward questions.

A careful history and thorough examination with laboratory procedures as indicated are always necessary. The character of the skin le-

sions produced by escharotics has been so often described that it need not be repeated here. Biopsy, culture, or curettage of the lesions may at times be necessary. When these patients cannot be kept under continuous observation, suggestions as to the appropriate location of new lesions followed by their appearance may help to clinch the diagnosis.

A word should be said about surgical wounds which, without obvious cause, will not heal. These are often most puzzling and the possibility of interference on the part of the patient should always be kept in mind. The lesion should be carefully explored, under anesthesia if necessary, and a search made for sinus tracts, foreign bodies, or any other condition which might keep the wound open. A dressing should be applied which will prevent the patient from reaching the area involved. For this purpose a plaster cast is ideal. Often painting the skin in the region of the wound with one of the dyes such as gentian violet or mercurochrome will leave tell-tale marks on the fingers should the patient attempt to reach the area. A window can be cut in the plaster cast for dressings provided it is closed after each dressing in such a manner as to prevent the patient from tampering with the wound. It may be either sealed with collodion or plaster-of-Paris or strapped with adhesive in a pattern which the patient cannot duplicate. Not infrequently the patients complain bitterly against the application of a cast and use every artifice to have it removed.

Daily inspection of the wounds will show a rapidity of healing that is surprising. Certain patients, when they realize that their actions are understood and see that the wound is going to heal, are able to adapt themselves to the idea of permanent recovery. Others will quickly pass from the care of the physician who has detected their actions and their lesions will again appear. Many of them may be satisfactorily treated only by an experienced psychiatrist.

### Treatment

The physician is usually faced with the problem of getting the lesion healed as a proof of his diagnosis before he can mention his suspicions either to the patient or to the patient's family. One can never expect coöperation from the patient while the lesions are present. After the physician has proved his diagnosis by the healing results obtained, the patient may be placed on good behavior by a promise to withhold the diagnosis from his family so long as he remains well.

It is essential both for diagnosis and for treatment that these patients be placed under close supervision and that the doctor be given absolute authority to apply any type of dressing he may think necessary. In the case of patients who fall in Groups 1 and 2 the lesions can be easily cured if the patients are kept under close observation. Material which might be used to cause the lesion should not be available and the body area involved should be made inaccessible by an occlusive dressing. After healing is complete recurrent lesions can frequently be avoided by holding over the patient the threat of exposure. This does not have to be expressed in words which the doctor might find it difficult to prove, for the patient quickly learns that the nature of his condition is understood. They can be told that their case will be fully explained to their family doctor, who will be instructed to return them immediately if further lesions develop.

It is doubtful whether the patients who fall in Group 3 can be cured and they should certainly be placed under psychiatric treatment. It is also very difficult to get them to admit the motive behind their actions. They are probably closely related to the group of masochists.

The patients in Groups 4 and 5 are primarily psychiatric problems and surgery should only be supplementary to the treatment of the major conditions.

### Prognosis

In Groups 1 and 2 the local lesion can be cured in all cases and in a high percentage recurrence can be avoided.

In Group 3, the lesion can be healed, but it is doubtful whether these patients can be permanently cured.

In Groups 4 and 5, the local lesion can be healed, but permanent recovery depends on the nature of the underlying psychiatric condition.

In conclusion I should like to make two quotations, the first from M. Dieulafoy:*

"When one goes to the depths of the mental state of these pathomimes, in whose case the goal or aim

*Report of Case of Self-Inflicted Lesions. Bulletin de L'Academie de Medecine, Vol. 1, 1908.

is not fraud, nor money, nor desire for gain, one is greatly at a loss to find an explanation for this mental state. Thus, here is a young girl who has made these ulcers for two years until they have disfigured her, and one cannot find a reason which will account for her acts. The girl whose history I have given made these ulcerations on her legs and allowed them to amputate her thigh and continued to make them with the idea that it might be necessary one day to have a new amputation.

"Our man allowed them to cut off his arm without divulging his secret when he would have had to say only a word to stop the surgeon's knife. And our man is not crazy, nor is he a degenerate, nor is he an alcoholic; he is not a neurasthenic, he is not even hysterical, there is no evidence of an hereditary taint, he is intelligent and well raised; at the insurance company where he is employed each person sings his praises, and, in the numerous conversations we have had with him, we have found him dignified and intelligent. Then, how can one explain this strange aberration which for two and a half years has incited this man to cover himself with ulcers and let them amputate his arm? He told us, 'I was driven to make my lesions just as a morphine addict is driven to the injection of morphine.'

"The comparison is not exact, for in the case of the morphine addict the injections of morphine are followed by pleasure and satisfaction, while the ulcers of our man give him only torture and pain. And then, his consenting to having his arm amputated—how can one explain that?

"The pathomimes of this category do not receive from their acts any profit or any good, but they experience a peculiar pleasure in making themselves a problem and in their complaints they get a great satisfaction out of mystifying their fellow-creatures. They have no confidants, they guard their secret with jealous care as a miser guards his treasures, and after a while, habituated to this unpleasant deception, they become accustomed to it and they cannot leave it of their own volition or free will.

"The deeds of this type of individual may well trouble the conscience of the legal physician. In the impulsive act which our man has committed, can one admit that he was responsible? No! He is not responsible in the least. Thus we told him after his mental state had been cured that for two years and a half he had obeyed a fixed idea, 'like a machine, without knowing why.'"

I will not attempt to go into a discussion of the psychiatric problem of these cases, but I should like to quote from Karl A. Menninger:*

"The chief elements in malingering of the self-mutilative type are: the infliction of a wound on the self which results in pain and loss of tissue; exhibition of the wound to persons who react emotionally to it and give sympathy, attention and efforts to cause healing; the deception of the observer as to the origin of the wound and often distinct efforts to defeat therapeutic measures and the obtaining of monetary or other material reward, or detection, exposure, with constant humiliation, reproach and sometimes actual punishment. . . .

"The well-known disparity between the great suffering voluntarily endured and the objective gain is to be explained on two bases: first, that the gain is only partly represented by the monetary reward, but includes also the satisfactions in exciting sympathy, attention, perplexity and dismay, and, second, the pain is not only incident to the device used for obtaining the gains, but is psychologically demanded by the conscience as a price for indulging in them. Actions speak louder than words, and it is clear that however conscienceless the malingerer appears (or claims) to be, he unconsciously feels guilty and inflicts his own punishment."

His conclusions are as follows:

"Malingering, therefore, of the self-mutilative type may be described as a form of localized self-destruction which serves simultaneously as an externally directed aggression of deceit, robbery, and false appeal. The aggression is of such an inflammatory sort that it, in turn, obtains for the malingerer not only sympathy, attention and monetary gain (at first), but, ultimately, exposure, reproach and 'punishment.' Both aspects of the induced treatment by the outside world are strongly tinctured with the perverted erotic satisfaction incident to masochism and exhibitionism.

"From this, one may conclude that the original act of malingering of this type serves chiefly as a provocative aggression; that is, it is a minor self-attack designed to excite a major attack (both indulgent and punitive) from other persons, the pain involved being the price demanded by the conscience for the unconscious satisfactions achieved."

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*Psychology of a Certain Type of Malingering. Arch. Neurol. and Psych., Vol. 33, 1935.

# Septic Branchial Cyst

## Eradication by Electrical Cauterization

## (Report of a Case)

By Clarence A. Berge, M.D.
Detroit, Michigan

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■ A branchial cyst is an embryonic remnant in the neck which produces unsightly deformity when distended. Repeated tappings for drainage, applied for cosmetic reasons, very often cause infection, and in this event the cyst becomes a potent focus of infection which produces constitutional symptoms.

A septic cyst produces a disabling factor similar to that of a diseased tonsil, and similarly to a tonsil the treatment of choice becomes the removal or destruction of the same.

The case reported is that of Mrs. M. S., aged thirty years when her cyst was eradicated September 12, 1938. Her first symptom was a swelling on the left side of her neck making its appearance at the age of fourteen. At first there were no symptoms at all aside from an ugly deformity. Between the year 1923 and the year 1937 this swelling was drained by tapping twenty-nine times. The cyst would remain small for a time after each drainage, but would progressively distend sufficiently during each six months to make her desire another tap.

In 1937 she came to the author to have her cyst drained as had been the routine previously.

*Past History.*—Her history showed that she had felt increasingly tired, regardless of exertion, almost continually since 1928, five years after the routine tapping of the cyst had been started.

*Physical Examination.*—Examination revealed a temperature of 99.0°F. Her physique was normally slender with mild malnutrition. Her appetite was usually good. Her tonsils had already been removed very cleanly and there was no evidence of dental sepsis. Chest, abdominal, and urinary findings were negative. She seemed a very nervous, introverted person keenly conscious of the ugly deformity in her neck. This was a fluctuant saccular tumor the size of a Bartlett pear protruding in front of the sternocleidomastoid muscle on the left. This enlargement showed no redness or heat, and was only slightly painful to pressure.

*Diagnosis.*—It was plainly apparent that she was suffering from low grade septic intoxication even though evidence of any fulminating infection was absent. The patient agreed that the infected contents of the cyst seemed causative of her constant tired feeling. A number of medical examinations revealed nothing wrong aside from the cyst.

*Procedures.*—The cyst was drained under novocain anesthesia and thirty cubic centimeters of creamy secretion which contained thickened fibrinous particles was exuded. A considerable enlargement was still palpable and it was apparent that not more than two-thirds of the cyst cavity had been evacuated. The patient was satisfied for the time and stated that this was as extensively as the cyst had been drained subsequent to the year 1928.

The cyst was drained again six months later and at this time the temperature was 99.4°F. and the patient said there had been no remission of her constant tired feeling. She was plainly very much discouraged.

### Discussion of Operative Methods

Eradication of the cyst was definitely indicated by this time. Formal excision of the cyst was considered; a most formidable surgical procedure requiring a large incision with dissection at the outer border of the cyst wall progressing inward from the sternocleidomastoid border to the posterior tonsillar pillar, passing through amid the great vessels and entailing the risk of cutting the laryngeal innervation and injuring the patient's voice.

The sclerosing method as described by Cutler and Zollinger was considered. In this case the drawback to using sclerosing was to evacuate the cyst completely of thick fibrinous material through any opening small enough to practically retain the sclerosing solution. Sclerosing could not be successful if thickened exudate prevented contact of the solution with the cyst wall and all contents remaining in would still be septic media. Elimination of the focus of infection was the most important thing and this could not be assured by sclerosing even though the deformity might be lessened visually.

It was decided to abandon the idea of formal surgical cyst excision and to only use the sclerosing treatment in case a certain method of thermal dissection of the cyst wall should prove unsuccessful: and as this method was successful, sclerosis was never attempted.

This thermal dissection is accomplished by the cautery. The writer has first used this method in removing Bartholin cysts and had found it satisfactory. It consists of opening the cyst

widely and then, while holding the wall edges under traction so they will flare apart, destroying the cyst wall tissue from the bottom out with the electrical cautery. There is, of course, a certain amount of sloughing discharge for some days

Fig. 1. Cyst as distended originally.

after the cautery application but this is minor and inconsequential. As far as ultimate results go it makes no difference whether the dissection of the cyst wall is thermal from the inside or is performed with a sharp scalpel from the outside.

*Operation.*—On September 12, 1938, thermal dissection of Mrs. S.'s branchial cyst was performed (Fig. 1).

Pre-operative medication consisted of ten grains of sodium barbital given by mouth one-half hour before the operation started. This was for protection against a possible novocain or cocain poisoning.

Skin and fascia were infiltrated with two per cent novocain and a one and one-half inch incision was made vertically over where the cyst was bulging the most anterior to the sternocleidomastoid border. This was made elliptical to cut out the old tapping scars. The protruding cyst was dissected bluntly until enough of it was exposed to permit making an opening in it of the same length as the skin incision and parallel with same. It was not necessary to go in deeply as the cyst wall became more and more adherent to adjacent tissues as separation progressed and the operator would have been forced to use the sharp knife edge if he had dissected further. The cyst was then opened to a length of one and one-half inches and forty cubic centimeters of creamy contents evacuated. The cyst wall was flared out on four sides and under traction the cyst resolved itself into a deep funnel-like cavity containing much mucoid substance and fibrin which had a mild putrefactive odor. This material was easily wiped away and the clean interior wall exposed. A gauge pledget saturated with two per cent cocain was placed within the cavity, packed down well to the bottom, and left in place for two minutes. The patient at this time was asked to speak during the time the cautery was applied in order that any difficulty in phonation might be accepted as evidence that burning was extending too deeply toward the laryngeal region (Fig. 2).

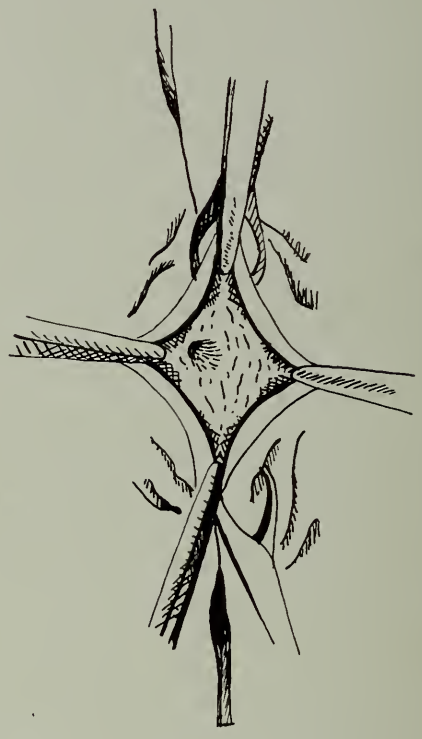

Fig. 2. Cyst wall prepared for cauterization.

The large round applicator of the Post cautery was applied to the cyst wall from the bottom outward, going clockwise around and around until the terminal edge was reached. The actual time of application of the cautery was about one minute for the entire area.

No hemorrhage was encountered. A rubber wick drain was placed in the seared cavity and skin and fascia were closed above this drain with two horsehair sutures. An ordinary small dressing of gauze and adhesive tape was applied.

There was no real pain at any time, but the hissing and scent of the cauterizing frightened the patient greatly for the moment. She left the table unassisted and walked from the office.

*Postoperative History.*—Convalescence was uneventful. The rubber wick drain was kept in for fourteen days and the drainage was serous and very moderate. Removal of the drain permitted the incision to close promptly and at this time there was still some palpable swelling in the neck, about one-fourth of the total volume present originally. October 7, 1938, the twenty-fifth day, the incision ruptured spontaneously and drained for three days. From that time on the incision remained closed and there was gradual regression of the necrosed cyst remnants until all evidence of the cyst had disappeared by January 1, 1939. There

was only slight discomfort during convalescence, which was ambulatory.

September 15, 1939, her temperature was 98.6°F. She did not regain a feeling of well being until after she was delivered of a living child May 17, 1939. The pregnancy undoubtedly levied its own toll upon her and the effect of eradication of the septic cyst could more truly be evaluated since the birth of the baby. Since that time she has felt well and strong and has possessed normal energy such as she did prior to the year 1928.

### Summary

A focus of infection was eradicated.

A cosmetic deformity was removed by an office procedure performed at reasonable expense leaving a negligible scar.

The personality change was particularly outstanding.

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# Cancer of the Cervix*

## Time Wasted

By Oliver E. Todd, B.S., M.D.

Toledo, Ohio

Oliver E. Todd, M.D.

*B.S., University of Michigan, 1932. M.D., University of Michigan, 1934. Attending physician at Toledo Hospital in Obstetrics and Gynecology. Junior Obstetrical Staff at Lucas County Hospital.*

■ This study was motivated by a desire to determine whether the factors mentioned by Miller[2] and Collins[1] were responsible for the delay seen among similar patients in the Departments of Obstetrics and Gynecology at the University of Michigan, and also, to note if possible, how much if any improvement has occurred in recent years. It was desired to devise some method of handling the problem so that patients might receive treatment earlier in the course of the disease.

This study covers a period of six years (July 1, 1931, to July 1, 1937) and includes the records of 634 consecutive patients with cancer of the cervix. All of these patients were seen and studied in the Gynecological Cancer Conference at the University of Michigan. One hundred per cent follow-up has been maintained since the origin of this conference in 1931. The information used in this study was obtained from careful review of the Conference records.

*Clinical Classification.*—All cases were grouped according to the clinical classification developed by and used at the University of Michigan. This system of clinical grouping has been continuously and successfully used by us since our cancer conference started in 1931 and is elsewhere fully described by Miller and Folsome.[3]

*Ages.*—The average age of the 634 cases was forty-seven years. The youngest patient in our study was twenty and the oldest seventy-nine years of age. Three hundred and fifty (55 per cent) were premenopausal while two hundred and eighty-one (44 per cent) were postmenopausal at the time of the onset of symptoms. In only three instances was the information so incomplete as to make it impossible to place them in one of the two groups listed below. Patients classified as postmenopausal were (1) Those in whom menstruation had ceased, or (2) patients having very infrequent periods associated with vasomotor disturbances, and finally, (3) all cases over fifty-five years of age.

*Parity.*—Approximately 13 per cent of the patients were nulliparas but of these 18 had one or more abortions. Among the remaining 87 per cent there were twelve cases for which the parity was not stated (Table I). This may be said to conform with the usually accepted relationship between cancer of the cervix and parity. The average number of children among the parous women was 4.1 per patient.

TABLE I. PARITY

| | Number | Per cent |
|---|---|---|
| Nullipara | 81 | 12.78 |
| Multipara | 541 | 85.33 |
| Not stated | 12 | 1.89 |

Average number of children (multipara) 4.1

*Education.*—Many educational programs have been carried on attempting to combat the inroads of cancer and bring the patient to physicians while the neoplasm is still early. This study would seem to demonstrate that effort in this

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direction has been of little value. As shown in Table II, there has occurred no significant change in the relative incidence of the various clinical groups admitted to the hospital over a period of six years (1931 to 1937). The great majority of cases are still far advanced (Clinical Group IV) when they come under observation.

TABLE II. CLINICAL GROUPING
7-1-31 to 7-1-37

| Clinical Classification on Admittance | Year of Admittance | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|
| | Before 7-1-31 | 7-1-31 to 7-1-32 | 7-1-32 to 7-1-33 | 7-1-33 to 7-1-34 | 7-1-34 to 7-1-35 | 7-1-35 to 7-1-36 | 7-1-36 to 7-1-37 | |
| Cancer of Cervix I | 4 | 4 | 2 | 7 | 2 | 1 | 5 | 25 |
| Cancer of Cervix II | 7 | 6 | 12 | 5 | 14 | 15 | 11 | 70 |
| Cancer of Cervix III | 19 | 28 | 14 | 34 | 26 | 39 | 16 | 176 |
| Cancer of Cervix IVA | 19 | 31 | 46 | 50 | 45 | 39 | 47 | 277 |
| Cancer of Cervix IVB | 1 | 9 | 8 | 13 | 14 | 12 | 19 | 76 |
| Cancer of Cervix IVC | 1 | 2 | 3 | 0 | 2 | 0 | 2 | 10 |
| Total Cancer of Cervix | 51 | 80 | 85 | 109 | 103 | 106 | 100 | 634 |

*Initial Symptom.*—**The majority of patients first sought medical advice because of abnormal bleeding. This so-called "spotting" was generally characterized by the fact that it was (1) intermenstrual, (2) progressive, (3) prone to follow trauma such as coitus, douching, exercise, et cetera, and (4) it was painless. This coincides with the findings of other observers who have repeatedly stated that abnormal bleeding or spotting is one of the most significant and consistent early symptoms in cancer of the cervix. Most patients also complained of a gradually increasing foul discharge which must also be considered a significant, though generally late symptom.**

### Entrance Diagnosis

Inspection of Chart I reveals that of the 506 cases with available information, 383 cases or 75.7 per cent entered the University Hospital with the diagnosis already made. Miller in his earlier study reported this figure to be 56 per cent and Collins found 77 per cent. One hundred and twenty-three cases or 24.3 per cent had not been diagnosed and of these 42 cases had not even been examined. Since most of these cases were well advanced when medical attention was first sought, this is not a very commendable showing. Since bleeding or spotting occurring after the menopause is likely to be particularly significant, a comparable analysis was made for both the pre- and postmenopausal groups as indicated in Charts II and III. Interestingly enough the number diagnosed and not diagnosed remains approximately the same in the two groups. Again referring to the studies previously mentioned, the number diagnosed among the postmenopausal group in Miller's original series was 64 per cent while Collins found 82 per cent diagnosed in the postmenopausal group in his follow-up study. If the physician would consider every case of postmenopausal bleeding cancerous in origin, at least until proved other-

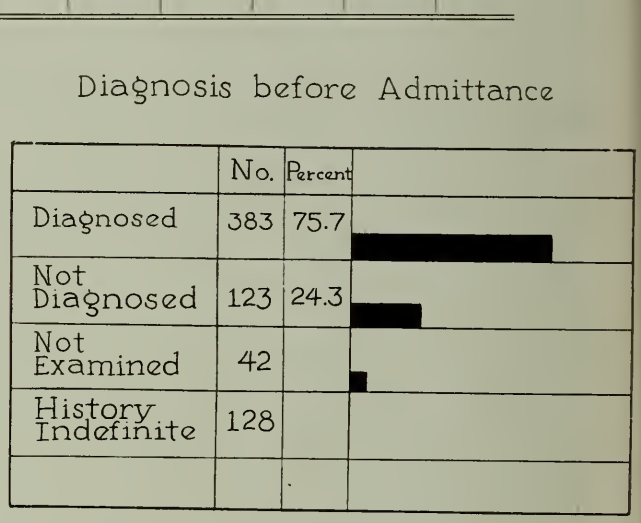


Chart I.

wise, the comparison between the pre- and postmenopausal groups would in all probability reveal a better diagnostic incidence for the latter group than is here reported. In most cases biop-

Diagnosis Before Admittance
First Symptom Before Menopause (350 cases)

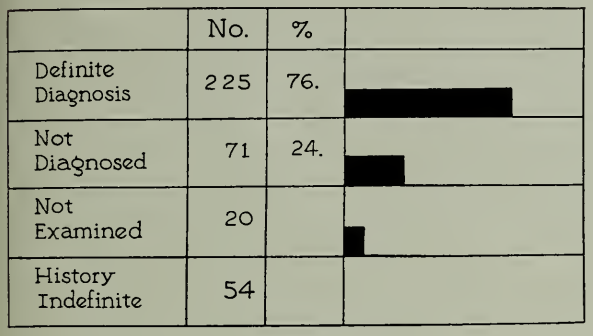


Chart II.

sy material can be easily obtained in the office with a Gaylor or punch biopsy forceps and the tissue sent to a competent pathologist for diagnosis. Then, if doubt still exists as to the presence of cancer, additional tissue should be obtained for microscopic study. A few unnecessary operations of this type are certainly preferable to a single missed diagnosis. Postmenopausal patients with bleeding should always be thoroughly investigated.

*Non-examination.*—**The fact that forty-two cases had not had a pelvic examination prior to admittance for treatment is indicative of a tendency which warrants criticism. The medieval idea that bleeding woman is unclean and should not be examined should be discarded.**

Also oxytocic drugs, useful enough in their place, should not be used to control bleeding without accompanying adequate investigation as to the source of bleeding. Too often such therapy is continued until the physician recognizes that the patient is not improving and examines her, or, the patient becomes dissatisfied and seeks medical attention elsewhere. Such practice may lead to the loss of much valuable time. Patients with abnormal bleeding should not be permitted to go unexamined for any considerable length of time. A patient who consults a physician with the complaint of abnormal bleeding does so because she is concerned and postponement of the examination is not justifiable.

*Time Lost by Patient.*—Table III shows the average elapsed time from the appearance of the first symptom (spotting) to the first examination and the average elapsed time from the

Diagnosis Before Admittance
First Symptom After Menopause (281 cases)

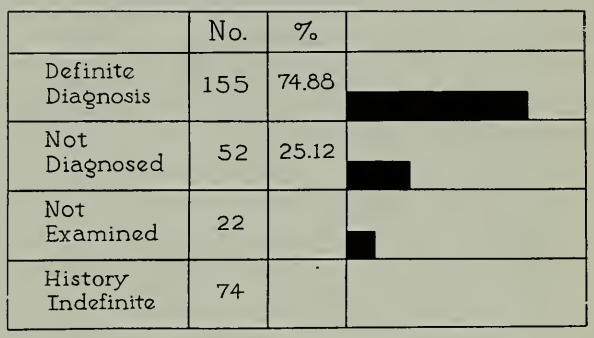


Chart III.

TABLE III. TIME WASTED

| | Days | Weeks | Months | Time Wasted (Months) |
|---|---|---|---|---|
| Average time interval from first symptom to first examination. | 178. | 25.48 | 6.4 | 6.4 |
| Average time interval from first examination to first treatment. | 32. | 4.62 | 1.1 | 1.1 |
| Average total time wasted 7.5 months | | | | |

first examination to the first treatment. The average time wasted for all cases from the appearance of the first symptom to the institution of therapy was 7.5 months. Approximately 6.4 months of this time waste may be attributed to the patient chiefly because of her failure to seek medical attention. Examination of records of patients having had their first examination elsewhere shows that, in this group, there was a delay of 7.4 months between the first symptom and the commencement of treatment, of which six months could be attributed to the patient for the reason mentioned above. Delay after examination may be due to failure on the part of the physician to recognize the disease, or if recognized, failure to properly impress upon the patient the importance of immediate therapy. It is our feeling that at least a part of this delay may be attributed to time required for making financial arrangements necessary for treatment. In many instances it was necessary for

TABLE IV. AVERAGE DURATION OF SYMPTOMS BEFORE THERAPY STARTED AT THE U. OF M. HOSPITAL

| Admittance clinical classification | Number of cases | Average duration of symptoms in weeks before therapy started |
|---|---|---|
| I | 24 | 12.7 |
| II | 66 | 18.7 |
| III | 162 | 28.7 |
| IVA | 269 | 31.9 |
| IVB | 65 | 38.7 |
| IVC | 6 | 49.5 |

TABLE V. CORRELATION BETWEEN SURVIVAL RATE AND DURATION OF SYMPTOMS PRIOR TO TREATMENT

| Duration of symptoms in months | 5-year Group | |
|---|---|---|
| | No. of cases | % living 7-1-37 |
| 0 – 3 | 15 | 53.3 |
| 3 – 6 | 24 | 29.2 |
| 6 – 9 | 13 | 30.8 |
| 9–12 | 7 | 28.6 |
| 12–15 | 14 | 42.9 |
| 15–18 | 1 | 100.0 |
| 18–21 | 1 | 00.0 |
| 21–24 | | |
| 24 & over | 1 | 00.0 |

the patient to return home, or if at home, to apply for financial aid through the local agencies before treatment could be started. We believe that this may have accounted, in part at least, for the loss of time attributed to the physician.

*Time Lost by Physician.*—In our study the time wasted by the physician (Table III) is considerably less than the six months reported by Miller in 1933. Interestingly enough the average time from the first symptom to the first examination in his series was 6.2 months, about the same as observed by us. In the follow-up report by Collins there was a time loss from the first symptom to the first examination of seven months and a time loss of 2.25 months from the first examination to the first treatment. Assuming that the Michigan and Iowa physicians are equally capable it appears that the recent educational programs have focused the attention of the average physician upon the close correlation between abnormal bleeding and cancer but have failed to impress the lay mind to any degree. Apparently most physicians are alert and are making every effort to detect the presence of cancer. How great an influence the few physicians who fail to keep up with modern trends influence these figures, is, of course, difficult to determine. According to a report of the Cancer Commission of the Pennsylvania State Medical Society[4] may years ago it was estimated that 10 per cent of the physicians, usually those who failed to attend medical meetings and who seldom read medical journals, were responsible for 90 per cent of the time waste attributed to physicians. We found that in those cases having their first examination at the University Hospital there was an average time loss of eleven days attributable to the staff. This delay is time required to secure state or county orders to cover the costs of hospitalization and treatment. This same factor, as already indicated, must be considered in the group having their first examination elsewhere.

**An average of 7.5 months for all cases from the onset of the first symptom to the institution of therapy should constitute a challenge to every practicing physician and every organization having lay education regarding cancer as its objective.**

Table IV shows the average duration of symptoms in weeks before the institution of therapy for the different clinical groups or classifications —i.e. the extent of the disease on admittance. As the average duration of symptoms before the institution of therapy progressively increases the clinical grouping naturally advances. While this is what may be normally expected, this does not represent the true picture for all cases. Intelligent patients with symptoms of only a few weeks' duration have been seen with carcinomatous involvement so extensive as to render the prognosis hopeless from the start. The cor-

ollary is also true for individuals have been seen with relatively early lesions but with prolonged symptoms extending over many months.

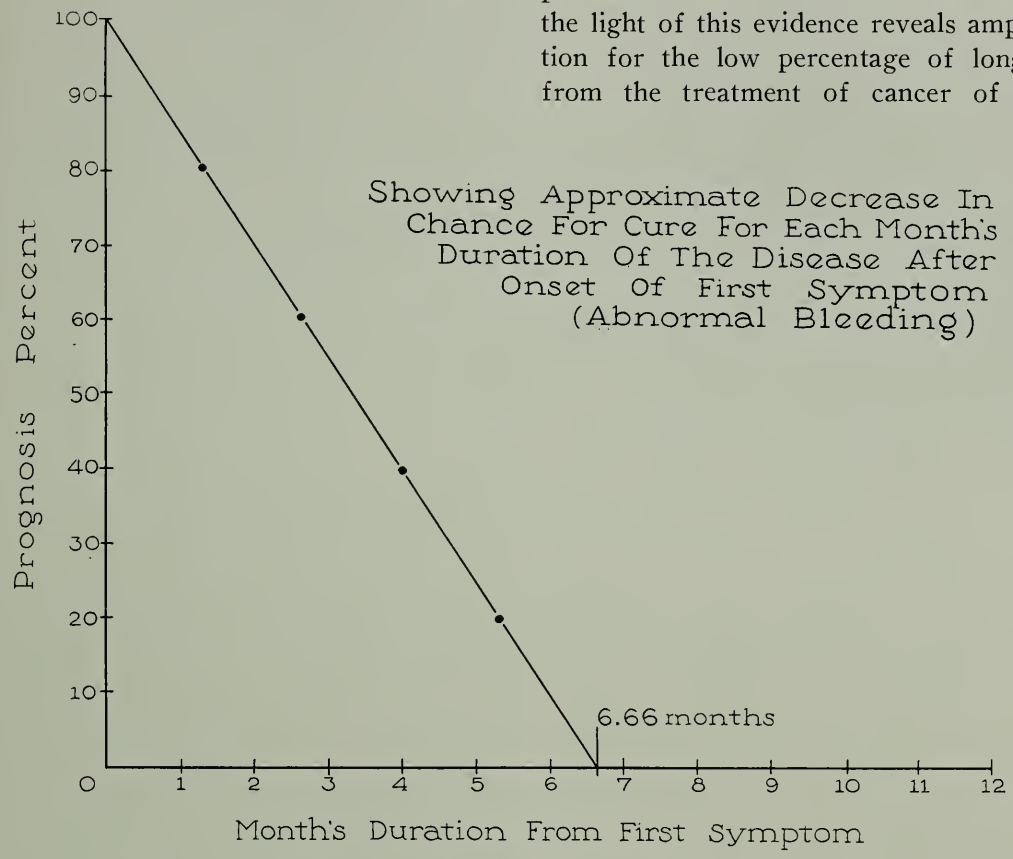


**Chart IV.**

*Adjustments.*—In Table V an attempt has been made to correlate survival rate and duration of symptoms prior to treatment. The fact that there were some patients who had symptoms more than a year before treatment was started and have survived five years suggests that in some cases at least there is not the close correlation between the extent of the disease and the duration of symptoms as suggested in Table IV.

Again referring to Table IV, if it is assumed that in the clinical grade IV cases (with parametrial extension) that the disease is beyond hope of cure then the chance for cure decreases 3.34 per cent per week or approximately 15 per cent per month. This figure is arrived at by plotting the duration of symptoms against the chance for cure. It is assumed that in the absence of symptoms the chance for cure would be one hundred per cent. When there have been symptoms for 31.9 weeks (the average duration of symptoms before therapy was started in our grade IV-A cases) the prognosis is zero, (Chart IV). Miller previously reported this percentage decrease in chances for cure as 20 per cent per month. Reconsideration of Table III in the light of this evidence reveals ample explanation for the low percentage of long survivors from the treatment of cancer of the cervix inasmuch as the average duration of symptoms in all cases before the institution of the therapy is 7.5 months.

*Immediate Diagnosis Made.*—Chart V shows the percentage of cases diagnosed by the local physicians at the time of the first consultation with relation to the duration of symptoms. Obviously as the duration of symptoms before medical attention increases the percentage of cases diagnosed also rises. The fact that some cases do not have symptoms early in the course of the disease is important. In this series there are 26 clinical group IV-A cases in whom diagnosis was made and treatment commenced within six weeks of the appearance of the first symptom. In a number of these cases the diagnosis was made in the absence of symptoms during the course of routine investigation for other complaints. Clearly lay educational programs must do more than emphasize the importance of

abnormal bleeding; they must also educate women to seek periodic pelvic examination, particularly after the thirty-fifth year.

the patient to seek medical attention.

5. In this series the chance for cure decreased at the rate of approximately fifteen per cent per month after the appearance of the first symptom.
6. If the reports of earlier observers, notably Miller and Collins, can be compared with our observation, and we believe they can, then it appears that the time waste attributable to physicians has materially decreased.
7. Women must be educated to seek periodic medical examination if early therapy is to become more than a cherished hope.

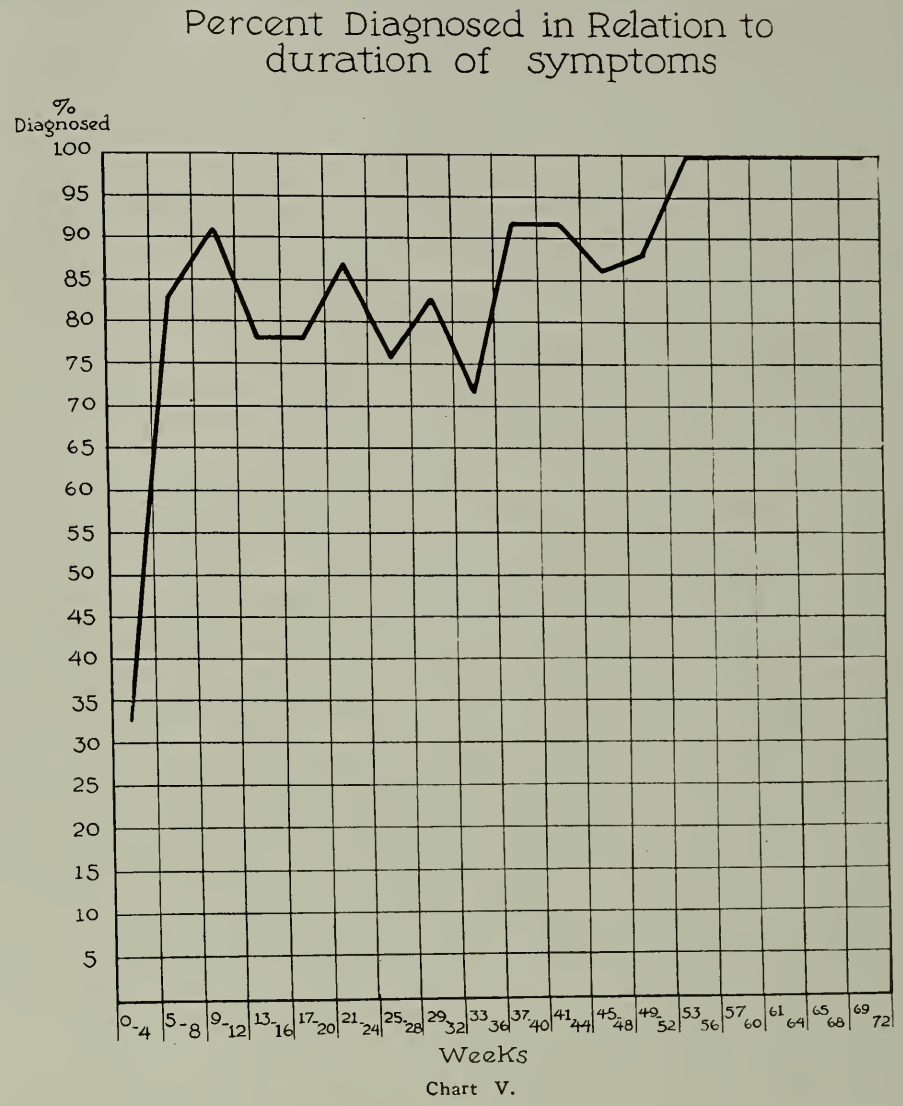


Chart V.

## Conclusions

1. The chief symptoms of cervical cancer are abnormal bleeding and offensive discharge. This abnormal bleeding is usually characterized by the fact that it is intermenstrual, progressive, prone to follow trauma and is painless.
2. The longer the duration of these symptoms the more advanced the disease is likely to be.
3. The average time lost from the appearance of the first symptom to the institution of therapy in this series is 7.5 months.
4. Most of the time lost before treatment can be attributed to a failure on the part of

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4. Quoted by Miller.[2]

# Moniliasis

## Sulfapyridine Treatment

By Raymond S. Van Bree, M.D.
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■ While monilia are recognized as the cause of various pathological conditions, there are relatively few reports in the literature in which the etiology is clearly established. This is particularly true of lesions other than dermatologic. This report concerns a case of gastro-intestinal and pulmonary moniliasis, in which the diagnosis was confirmed by laboratory findings and in which sulfapyridine was used for treatment.

### Case History

The patient was first seen June 25, 1937, complaining of acute distention and marked spastic pain in the abdomen and a slight neuritis involving the right shoulder.

He stated he had been having these gastro-intestinal attacks off and on for the past twenty years, and they had gradually increased in intensity and duration. During the last year of the world war, he was gassed with mustard gas, and at that time almost died. Shortly thereafter he was discharged from the army with the following diagnosis: "1. Tuberculosis, pulmonary chronic, active, moderately advanced. 2. Chronic Bronchitis. Prognosis: Favorable."

He was placed under treatment in an army hospital for several years. Attacks of pain in the abdomen started at about that time and distention began making its appearance in about 1934. They were usually more severe at night. At the onset of one of these attacks, a severe distension of the abdomen would appear within fifteen minutes to one-half hour and continue for a period of twenty-four hours to one week. Neuritic pains in the right shoulder appeared two or three times during recent attacks.

*Past History.*—The patient had never to his knowledge had a skin disease. Several times tuberculous adhesions in the abdomen had been suspected and operations suggested. In June, 1937, a diagnosis was made by a reputable neurologist of "Post-influenzal radiculitis and inflammation of abdominal sympathetics."

*Physical Examination.*—On examination, patient was a well-nourished male, weighing approximately 145 pounds, medium height, dark skinned, aged forty-nine. Temperature, pulse and respirations normal. Eyes, ears, nose and throat negative. Chest negative, lung fields clear and resonant, heart sounds normal, abdomen acutely distended. No particular points of tenderness were elicited. On auscultation, intestinal action could be heard. The rest of the examination was negative, except for slight tenderness over circumflex nerve.

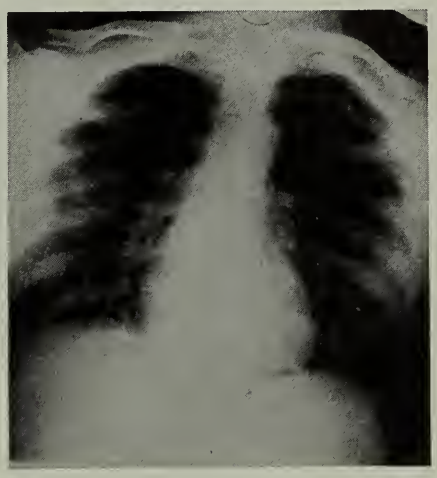

Fig. 1.

*Progress.*—Patient was treated empirically with intravenous sodium salicylate and the acute attack subsided in about three days; the neuritis did not return. This method of treatment was continued until September 17, 1939, with attacks reoccurring approximately every two or four weeks. Results of above treatment were indifferent.

During the month of September, 1939, the attacks of pain and distention gradually increased in frequency and violence until they merged into one continuous attack. On September 17, 1939, the patient was apparently suffering from an upper respiratory infection and pneumonia was suspected. He consented to hospitalization at this date. Previous to this he had made periodic trips to government hospitals for observations but always returned with no definite diagnosis.

*Laboratory Examination.*—X-ray reports on the chest on September 17, 1939, were negative. Report on the abdomen was as follows: "Non-rotation of the colon considered a congenital anomaly. Generalized slowing up in passage of barium through the small bowel, the exact etiology of which is not determined. No organic pathology to account for the slowing is observed and may be incident to the congenital anomaly although this is thought unlikely. No obvious bowel obstruction is demonstrated in these films." The Kahn test was negative, urine negative, except for slight traces of albumin and occasional pus cell. No tubercle bacilli were found in feces or sputum. No pneumococci were found in sputum.

*Further Progress.*—The attack gradually subsided sufficiently so that the patient decided to go home on September 25, 1939. Shortly after he returned home, distention and pain again increased in severity and

became continuous. Upon his complaint that the right side of his throat often felt scratchy during these attacks, a throat culture was taken and sent to the Michigan Department of Health Laboratory, which reported "Fungi resembling monilia were found." Subsequently, the cultures were studied further and accepted to be monilia. Death was produced in a rabbit by injection of the cultures, the organisms were recovered and the histologic picture found compatible with an infection with pathogenic fungi. Monilia were also found in the sputum and stool but not in the urine of the patient.

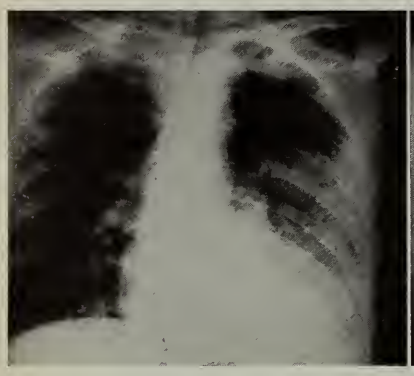

Fig. 2.

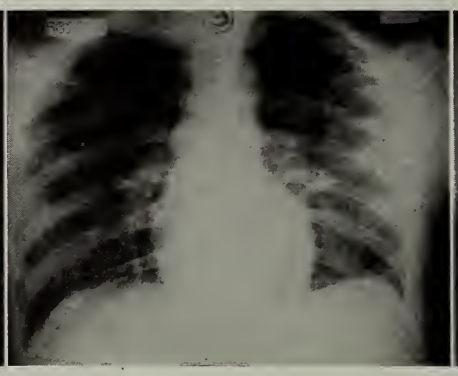

Fig. 3.

Fig. 4.

After the patient had been treated with gentian violet applications to the throat for ten days, gall-bladder drainage was done and monilia were isolated from the bile. An antigen was made from a killed fungus culture and both scratch and intradermal tests were made. There were only moderate local reactions, but in both instances the severity of the abdominal symptoms was noticeably increased for a period of eighteen to twenty-four hours. On December 18, 1939, a solution of gentian violet was given intravenously. It was afterwards discovered that the solution had been made up to 3 per cent instead of 1 per cent. After 8 c.c. had been slowly injected the patient complained of moderate burning in the mid-sternal region. Fourteen hours later the patient was sent into the hospital.

On admittance, the patient had marked dyspnea and pain in the chest. Temperture was 102.6° and remained around 101° for the next five days. Coarse râles were heard over both lung bases, extending up to the nipple on both sides. Slight dullness was found a little later on the left side between the fourth and seventh ribs with increased breath sound over this area. The white blood count was 15,000 with 77 per cent polymorphonuclears, 17 per cent large lymphocytes, 4 per cent lymphocytes, and 2 per cent transitionals. Sputum examination, on entrance, showed a few pneumococci which did not react to diagnostic serum mixtures, a, b, c, d, e, or f. Patient remained almost continuously in the oxygen tent for ten days, pain in the chest, and dyspnea gradually subsiding. Temperature gradually subsided from 102.6° to normal in six days. During the first thirteen days, the patient had moderately severe attacks of distention and pain merging into each other and continuing to January 1, 1940.

*Treatment*—On January 1, 1940, the patient suffered a relapse, with pain in the chest, and 103° temperature rectally. On January 2, 60 grs. of sulfapyridine was given during a period of twenty-four hours. X-ray of this date shows pneumonic consolidation of left lung with clearing up in its central portion, showing evidence of beginning resolution. White blood count was 43,200 with 93 per cent polymorphonuclear. Sulphapyridine was reduced on January 3 to 40 grs. and temperature became normal on January 4, with a daily afternoon rise to 101° until January 7. Sputum examination showed no pneumococci at the height of the fever. Temperature stayed normal thereafter and patient was remarkably free from pulmonary symptoms. During this period, a dose of 40 grs. of sulfapyridine was given daily. On January 10 it was reduced to 30 grs.; on January 13, to 20 grs.; and on January 15 to 7½ grs. The patient continued on 7½ grs. sulfapyridine daily until February 3, when the dosage was increased to 15 grs. daily during an upper respiratory infection. The drug was discontinued on February 9.

During the use of the sulfapyridine the patient did not have any pain or distention except for one moderate attack lasting twelve hours on January 29 immediately following an intradermal test of the monilia antigen. The local skin reaction for this test was 2 plus for twenty-four hours. The wheal, however, remained raised and reddened for over two weeks.

After the temperature became normal on January 7 the patient raised a small amount of mucopurulent sputum each day, at first blood-tinged. The report of x-ray taken on January 16 was "Delayed resolution in pneumonic consolidation in lower left lobe. The possibility of tuberculosis should, we believe, be considered in these cases. We suggest sputum examination." This observation was interesting in view of the fact that Stovall and Greeley have stated that pulmonary moniliasis in "the severe type is much like tuberculosis and in our experience is often mistaken for it." (ref. Stoval and Greeley: Bronchomycosis, Jour. A.M.A., 91:1346, [Nov. 3] 1928.) The tuberculin test of Mantoux type, 0.1 and 1 mg. proved negative.

Sputum examination showed no pneumococci or B. tuberculosis but continued to show monilia. Whether monilia was the primary cause of the pneumonic condition or secondary invader on top of irritation caused by intravenous gentian violet is a question which remains unsettled.

On February 10, the day after sulfapyridine had been discontinued, specimens of feces and mucopurulent sputum were examined and monilia again found but in very small numbers. Further x-ray reports showed continued improvement of pulmonary condition and patient was sent home on February 14.

On February 15, patient again complained of gas pains and distention. Sulfapyridine grs. 14 was given at 7:30 P.M. and pain and distention quieted down considerably, improvement being noted for six hours following administration of the drug. Another 15 grs. was given at 11 A.M. on February 17, and, following this, pain and distention were entirely gone by 5 P.M. There was no further attack until February 29 at 3:30 P.M. At 6:30 P.M. 15 grs. of sulphapyridine were given and the dose repeated at 11 P.M. By 4 A.M. the next morning, the pain was gone and by 9 A.M. the bloating had subsided. The dose of 15 grs. sulfapyridine was repeated at 2 P.M. On April 25, the patient had another violent attack of distention and pain starting suddenly at 7 P.M. He was given 15 grs. sulfapyridine at 8 P.M., 15 grs. at 2 A.M. (April 26) and 7½ grs. at 7 A.M. By 2 P.M. April 26, all pain and distention had disappeared. There have been no further attacks to date, May 31, 1940. An x-ray examination, March 4, 1940, showed "marked improvement in the pneumonites . . . since last examination."

### Summary

A case has been reported of a patient suffering from a recent pneumonic condition and previous gastro-intestinal distress which extended over approximately 18 years, dating back to a clinical diagnosis of tuberculosis, unconfirmed.

Monilia were found in throat cultures, bile, feces and sputum. Pathogenicity was demonstrated in the rabbit.

There was clinical evidence of amelioration of symptoms as a result of sulfapyridine therapy.

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# Sulfamethylthiazol In Staphylococcus Albus Bacteremia

## Secondary to a Carbuncle of the Nose

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■ Sulfamethylthiazol (2 [para-amino-benzene-sulfonamido] 4-methyl-thiazol), a new sulfanilamide thiazol derivative, has been distributed for experimental use and clinical investigation. Barlow[1] has shown this drug to exert a pronounced action against experimental staphylococcic, streptococcic and pneumococcic infections, both in vitro and in vivo. Long[6] has carried out studies on the absorption, distribution and excretion of the sulfathiazol derivatives in man. He found that the drug is excreted much more rapidly than is sulfapyridine. The drug is excreted both in the urine and the feces. The drug seems to be distributed in exudates and transudates in about the same ratio that has been noted previously for sulfanilamide. Herrell[5] described the clinical use of sulfamethylthiazol in a case of staphylococcus aureus bacteremia secondary to a staphylococcus infected postoperative incision with very favorable results. Helmholz[4] has shown that the two compounds, sulfamethylthiazol and sulfathiazol, have a definite bacteriostatic effect on strains of staphylococcus aureus and streptococcus fecalis. He found that in urinary infections, the latter organisms were killed off by these drugs. Pool and Cook[2] have found the new thiazol drugs to be less toxic than either sulfanilamide or sulfapyridine. Neither sulfa-

methylthiazol nor sulfathiazol is conjugated by the body to the extent that sulfanilamide and sulfapyridine is conjugated. Fitch[3] described the use of sulfathiazol in a case of spinal epidural abscess caused by staphylococcus aureus complicated by septicemia and pyemia with favorable results.

We wish to present a case of staphylococcus albus bacteremia complicating a carbuncle of the nose which was successfully treated by the use of sulfamethylthiazol.* The drug was administered after failure to obtain clinical improvement from sulfanilamide and sulfapyridine. The drug was given in doses of 1 gram every four hours after an initial dose of 4 grams. On only one occasion did the patient vomit a short time after being given the drug, but it was tolerated well on all other occasions.

## Case Report

G. B., a well developed girl of sixteen years, was admitted to Leila Y. Post Montgomery Hospital, Battle Creek, Michigan, on February 23, 1939. Her only complaint was that of a pimple on the right side of nose in the right nostril for the past four days. This was gradually getting larger, tender and painful.

Physical examination disclosed a small carbuncle in the right nostril, the size of a small pea. This area was reddened and tender. No fluctuation was present. The anterior cervical glands on the right side of the neck were slightly palpable. The rest of the physical examination was negative, and no fever was present on admittance. The white blood count was 16,500 with 64 per cent polymorphonuclears. Urinalysis was essentially negative. The patient was put on sulfanilamide, 15 grains every six hours, along with wet boric compresses to the nose. Despite this treatment, the patient's temperature gradually increased to 103.6° F. in four days. The carbuncle of the nose had burrowed posteriorly into the vestibule of the mouth. On February 27, 1940, fluctuation appeared in the mouth above the upper lip where a small incision was made, and several drops of pus exuded. The patient was put on a peroxide mouth wash. The following day, the patient had a moderately severe chill lasting about fifteen minutes, followed by a temperature of 105.2° F. From February 29 to March 3 the patient ran a septic course with the temperature ranging from 100° F. to 106° F. Her general condition was becoming poorer associated with apathy, mental sluggishness, no appetite and generalized weakness.

A blood culture was taken following the chill and a Gram positive Staphylococcus was found. Repeated blood cultures demonstrated the organism to be Staphylococcus albus. During this entire time the patient was under sulfanilamide treatment without any improvement. On March 2, 1940, she was put on sulfapyridine without any remarkable change in her condition. The following day she was transfused with 250 c.c. of citrated blood. This was followed by a febrile reaction reaching 107° F. On March 3, 1940, sulfamethylthiazol was administered with an initial dose of 4 grams followed by 1 gram every four hours.

**Within twenty-four hours the temperature dropped to 100° F. and within thirty-six hours after treatment was started with the new drug, the temperature became normal and remained that way until her discharge on March 20, 1940. The patient made a remarkable recovery. The carbuncle of the nose was completely gone two days after initiation of sulfamethylthiazol treatment.**

Four repeated cultures taken after the onset of thiazol treatment continued to be positive for Staphylococcus albus. On March 14, 1940, eleven days after beginning of sulfamethylthiazol treatment, the first sterile blood culture was reported. This has been repeated on four different occasions and the blood stream reported sterile. The patient's general condition has remained excellent since her discharge.

Repeated urinalyses have shown no renal damage. Twenty-three blood counts were taken through the illness. The red blood cells never dropped below 3,130,000 and the lowest hemoglobin was 57 per cent at the same time this count was reported. Two transfusions by the indirect citrate method were given. The white blood count did not show any leukopenia but there was a tendency to a granulocytopenia, the average granulocyte count being about 50 per cent, while the lowest level was 30 per cent.

## Summary

A sixteen-year-old child had a bacteremia caused by a carbuncle of the right nostril which burrowed into the vestibule of the mouth. The elevated temperature and a blood culture positive for Staphylococcus albus indicated a bacteremia. Sulfamethylthiazol in moderate amounts were given with very little toxicity. After eleven days of therapy, the blood stream became sterile and has remained so. The patient made a remarkable recovery.

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# Experience with the Blood Bank*

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Many medical ideas, fashions and procedures appear to enjoy recurring cycles of new popularity, and so it is not surprising that we are again using a method of blood transfusion which we practically discarded about twenty years ago. In 1923 one of us (OAB),[2] in discussing direct transfusions, referred to a method of transfusing citrated blood which we considered satisfactory, but recommended the direct transfusion technic as preferable. Recently that same apparatus and technic, slightly modified, has largely replaced direct transfusion methods. The transfusing of unmodified blood, while unquestionably of greater benefit to the patient, never ceased to be a rather highly specialized technic. Generally speaking a blood transfusion is a hospital procedure and the comparative simplicity of the indirect transfusion has led to its widespread adoption in institutional practice. While this has been somewhat regretful, it has lead to important developments and advances.

The imagination of both laymen and physicians was stimulated a few yeas ago by popular accounts from Russia of the transfusing of cadaver blood. It is difficult to find clear-cut descriptions in the medical literature of results obtained by Russian investigators,[9] but at least the idea of blood storage was firmly implanted. Our first serious consideration was given the matter about four years ago after discussing the possibility of blood refrigeration with Fantus,[7] who at that time was contemplating such a step for Cook County Hospital. There was apparently very little blood banking done in this country prior to 1937 but in the past three years most of the large hospitals in this country have instituted such a service.

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## Overcoming Objections

The blood bank at Detroit Receiving Hospital had its beginning in a small way during the summer of 1937 when an occasional bottle of citrated blood would be placed in the ice box of the main laboratory for several days until the patient for whom it had been taken was in need of a transfusion. During this period of development there were many objections from the various services to using a common blood bank, the main basis for objection being the fear that blood put into the bank would be used for another service and not replaced. During this period it was common practice for some of the services to hide blood in ward refrigerators, thereby establishing a private blood bank for individual services. During the first year the bank did not flourish both because the house staff did not readily adapt itself to the idea of administering stored blood and because there was even active opposition to the practice. However, the value of having blood always available became more and more appreciated, and at the beginning of the second year the attitude toward the bank changed abruptly and for the past two years the bank has been accepted as an indispensable adjunct to institutional medical and surgical practice.

During this period 42,000 patients have been admitted to the hospital and over 4,000 transfusions administered, all of which have been given with bank blood.

**Considerable financial saving has of course been possible, but the chief value of the bank has been the ready availability of blood when needed and the elimination of the usual confusion attending the selection of suitable donors for transfusions in emergency situations which frequently arise during the night or on week-ends, holidays, et cetera.**

It is readily admitted that the financial aspect of blood bank operation, particularly that involving the laboratory examination of donors, is much simpler in a charity hospital than it might be in a private institution. For this reason and because of the large number of traumatic cases cared for, the bank is a particular necessity in a hospital of this type.

### Source of Blood

An important consideration, of course, in the operation of a blood bank is the source of blood. It is customary for a member of the resident staff to approach the relatives or friends of any patient presenting indications for a transfusion. The need is explained to the family without frightening them, the point being made that a transfusion is no longer a life and death procedure but is a commonly employed form of therapy. Frequently such a plea results in more blood being contributed for that patient than is necessary, the excess profit being used for other patients who have no friends or relatives. We never have encountered any difficulty with donors who felt that they had contributed too much blood.

### Administration of the Bank

Eight clinical services participate in the bank which is controlled by a committee composed of a resident from each major service, including pathology inasmuch as the department of pathology is chiefly responsible for the operation and administration of the bank. This committee meets once a week at which time problems pertaining to the bank are discussed. It has not been found necessary to establish a transfusion team; the internes, under supervision and with modern equipment, are able to take and give blood without difficulty.

Good bookkeeping is necessary in order that all blood is fully accounted for at all times and that proper data are available for statistical purposes. A separate balance sheet is kept for each service and a report is rendered every forty-eight hours showing the credit or debit of each service. When the interne deposits blood in the bank the technician in charge gives that blood an identifying number and credits his service with the amount of blood deposited; the reverse is done when blood is withdrawn. The intern depositing the blood fills out a "donor card" upon which is written pertinent data concerning the donor including the date, donor's name and address, history of venereal disease, serum sensitivity, allergy or malaria, and the number of hours since the last meal, together with a statement that he or she is physically fit to serve as donor from a clinical viewpoint. Later the blood group and result of the blood test for syphilis are entered on this card.

When blood is withdrawn from the bank a cross matching with the recipient is performed and a "recipient card" of a different color is attached in place of the "donor card." The technician writes the bank blood number on this card and later the intern records such data as date, name of recipient, case number, ward service, amount of blood given, the indication for and time required to give the transfusion. Various signs and symptoms of a reaction are listed on this card such as chill, dyspnea, cyanosis, pain, urticaria, et cetera. These are checked when noted and space is available for describing any reaction which might occur. On this card is also space for recording temperature readings taken before the transfusion and every half hour after the start of the transfusion, regardless of the time required for the blood to run in. Later these cards are stapled back to back and a complete record of the transfusion is thus provided. The pairing of these cards insures against failure to fill out the recipient card.

### Technic of Use

The transfusion apparatus used in this hospital is essentially that described by Cooksey.[5] The flask has a capacity of 700 c.c. and is equipped with a rubber bulb for creating a partial vacuum. 100 c.c. of a 2 per cent solution of sodium citrate are placed in the flask for 500 c.c. of blood. The transfusion sets, as well as all intravenous apparatus, are cleaned and sterilized in a central supply room by two nurses who are experienced in this work. The set is completely assembled before sterilization, thus reducing the chance of contamination on the ward. The citrate solution is not placed in the flask before sterilization chiefly because it is felt that aspirating the citrate solution into the flask before the transfusion has the advantage of moistening all surfaces with the anticoagulant.

Certain minor technical steps and procedures are important. Gentle handling of the blood at all times is insisted upon because agitation hastens hemolysis and increases the incidence of post-transfusion reactions. A sample of uncitrated donor's blood is placed in a small test tube which is taped to the large flask and from this necessary laboratory tests can be made. These tests are not performed until the blood is deposited in the bank. Positive blood tests

for syphilis among our donors have not exceeded 2 per cent and we feel that the discarding of this negligible amount of blood is less objectionable than the confusion and annoyance entailed in checking the donors previously. The temperature of the refrigerator should be kept between 0° and 5° C. at all times, preferably around 2°. Our refrigerator has an automatic recording thermometer which is a distinct advantage.

### Technical Experiences

Our experiences with the bank have been interesting and instructive and our ideas regarding the relative importance of various factors have changed several times.

**At the beginning we believed that the blood could be stored for at least three weeks. Now we believe that a maximum of a week is preferable.**

It has been stated that the life span of fresh erythrocytes in the circulation of the recipient is about 120 days and that span decreases six days with each day of storage. Furthermore, it has been found that the prothrombin content of the plasma decreases to a level of 60 per cent at the end of the third week.[8] Therefore, if blood is given either to correct anemia or for its hemostatic effect it should be comparatively fresh. Donor's cell suspensions are kept taped to the flask of blood while it is in the bank, and before using a direct matching is performed between recipient's serum and donor's cells.

As previously stated by one of us (OAB),[3,4] type O (Moss IV) donors can be used universally with safety. This statement, while obviously true, has been challenged by several writers and even today the opinion is stubbornly adhered to by some that donors of the recipient's group are preferable.

**Experience has proved that the use of universal donors is a safe practice.**

The reason is clear: the cells of group O blood possess no agglutinogens and, therefore, cannot be agglutinated. This is an important point and has contributed considerably to the safety of blood transfusions.

In the experience of Diggs and Keith,[6] hemolysis of bank blood is an important factor in the production of transfusion reactions. Following this suggestion we performed a hemolysis test, consisting simply of centrifuging a small amount of thoroughly mixed blood taken from the transfusion flask. In several hundred consecutive transfusions we found that after the tenth day hemolysis increased rapidly, but was negligible within the first week, seldom more than one or two plus and usually none. A study of 400 transfusions convinced us that hemolysis up to and including two plus was not a factor in producing post-transfusion reactions and we concluded that in giving bank blood which had been properly handled and stored at the proper temperature for less than ten days the hemolysis factor could be disregarded.

Other laboratory tests to be performed on banked blood should be considered. The percentage of hemaglobin should doubtless be determined but a routine leukocyte count is hardly necessary. Blood cultures have been run on over 100 bank bloods at the time of administration but the blood was given without waiting for the result. In several instances the cultures were positive for non-pathogenic micro-organisms but no reactions or other ill effects were produced.

**Considering the fact that any bacteria present will be in small numbers and probably non-pathogenic, and the natural bactericidal properties of the recipient's blood, it would seem that the taking of blood cultures routinely from bank blood when it is used is both unnecessary and impractical.**

Furthermore, removing samples of blood from the storage flask for various laboratory tests invites contamination and should be avoided.

Brem, Zeiler and Hammack[1] and others have stated that the use of fasting donors reduces the incidence of post-transfusion reactions. In 1,500 transfusions given during the past eight months at this hospital the results have been carefully studied and recorded. Attention has been given to the interval between the time of the last meal and the giving of blood and we have found that there has been not the

slightest relationship between the two. We have obtained the same information regarding the ingestion of alcohol and the same can be said of alcohol as of food.

The speed of giving the blood has also been studied and we have been forced to the conclusion that the optimum time for a transfusion, as far as reactions are concerned, is from sixty to ninety minutes. Several months ago we discontinued heating the blood before giving it and our figures would indicate that this change has reduced the percentage of reactions. The chief objections to heating appear to be frequent overheating and undesirable agitation while heating. Over 1,000 consecutive transfusions of cold blood have been given, frequently out of the refrigerator less than thirty minutes. The only untoward result of this practice, that we have been able to see, has been a local cooling of the tissues in and around the antecubital fossa and this did not seem to annoy the patient.

To discuss the percentage of post-transfusion reactions is difficult because in no two series of cases are the same criteria used. Because such a discussion has little comparative value it will be omitted here. The amazingly low percentage of reactions in some series would indicate that very liberal criteria are sometimes employed.

It is doubtful if, in the light of present day knowledge and experience, any large or moderate sized hospital would care to function without a blood bank. In our experience it has been a valuable asset in reducing transfusion delay, in eliminating the confusion and extra labor caused by the testing of donors for emergency transfusions, and in a large saving of money formerly spent for professional donors. In the past two years no professional donors have been employed at Receiving Hospital.

One of the most important developments of the blood bank has been in the plasma bank. This will be discussed by us in a subsequent issue of THE JOURNAL.

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# Development of the Plasma Bank*


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■ As was stated in a previous article,[5] a most fortunate outcome of the blood bank has been the plasma bank. During the past year great interest has developed in the giving of plasma. Considerable impetus was given the subject by the extensive work done on shock by Moon,[7] and Blalock.[1,2,3,4] These investigators found that the most serious change undergone in shock was diminution of circulating fluid volume, the capillary walls becoming more permeable, leading to the escape of plasma into the tissues. A vicious cycle is set up with more and more circulating fluid being lost resulting in hemoconcentration. It has been found that the administration of glucose and salt solution has but a fleeting effect upon blood volume, inasmuch as these substances exert no appreciable osmotic pressure within the vessels which might operate to draw lost fluid back into the circulation, but instead are rapidly diffused out through damaged capillary walls into the tissues (Fig. 1). It was obvious that the most satisfactory treatment for shock was the introduction into the blood stream of some substance which would raise

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osmotic pressure and would not rapidly diffuse out from the circulation. Whole blood partially fulfilled the requirements. However, when hemoconcentration exists there is little advantage to introducing more blood cells which, when not needed, are more or less inert. In other words, under such conditions, a whole blood transfusion really amounts to giving equal amounts of useful and inert material.

**Blalock has stressed the use of plasma as the ideal treatment for shock from all causes and it has been known for years that plasma is a valuable therapeutic agent in cases of severe burns. It now seems apparent that plasma is preferable to whole blood in all emergencies where transfusions have been employed in the past except carbon monoxide poisoning, where normal red cells are badly needed. Severe hemorrhage is no exception to this statement because here it is shock and not anemia which endangers the patient's life and which must be combated promptly and forcefully. We are coming to realize that the chief indications for whole blood transfusion are to correct severe acute anemia from hemorrhage after the patient has been restored from shock and to correct severe chronic anemia where drug therapy is either inadequate or impractical, e.g., in preparation of an anemic patient for operation.**

Prior to the advent of the blood bank, plasma was not readily available but today it is a natural by-product of the former. Gravitation alone is necessary to separate cells from plasma. Centrifugation yields slightly more plasma but is not necessary. In the beginning it was our practice to separate the plasma from cells only after it had been in the bank for some time (about fourteen days) and apparently was not going to be used. Now we attempt to anticipate the amount of whole blood necessary, being sure to keep an adequate supply of Group O (Moss IV) available, and then to convert the remainder into plasma while it is only a few days old. Berkefeld filtration will produce plasma of superior appearance, and of course would insure sterility, but we do not feel that this is necessary. The fine shreds and flocculi frequently found in plasma, which apparently originate from foam, are not objectionable and more or less disappear upon agitation. As in the administration of refrigerated blood, it does not appear necessary to heat plasma before using.

At Detroit Receiving Hospital plasma transfusion had its origin in the realization that too much blood was being discarded because it was not being used within the limit of fourteen days, which we observed at that time. It was felt that a too valuable therapeutic commodity was being discarded. The surgical staff administered some of this plasma to a few shock and burn cases and were favorably impressed by the results obtained. The success of 40 or 50 such transfusions made it apparent that more than the accidental accumulation of plasma would be necessary to supply the needs of the hospital. A more systematic production of plasma was, therefore, instituted. It was at this time that we became convinced that our supply of plasma should be obtained from fresh bank blood. After separation, the plasma can be kept in the refrigerator for weeks or months. If desired to store for an unusually long time it could be concentrated by lyophilizing.[6]

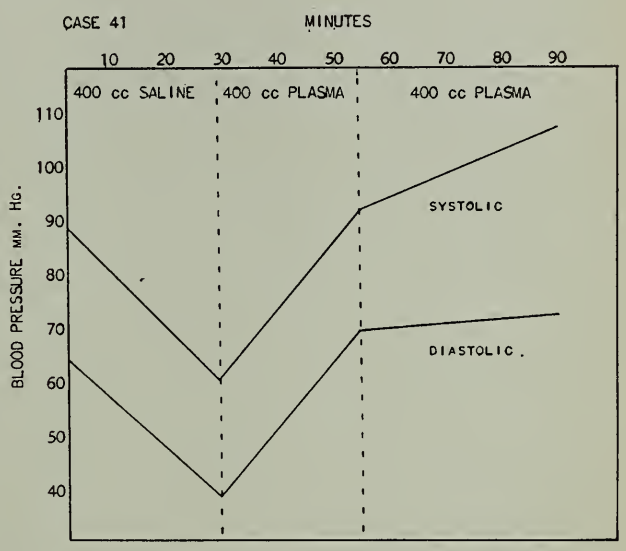


Fig. 1. Chart showing relative therapeutic value of saline and plasma in a case of perforated gastric ulcer.

### Preparing the Plasma

The method of preparing plasma in this hospital has been reduced to its simplest form. At the end of twenty-four hours the citrated blood has usually separated into two distinct layers with the supernatant plasma assuming a clear yellow color. At the end of three days maximum packing of the cells has occurred.

TABLE I. AGGLUTININ TITER OF 412 SPECIMENS OF SERUM OR PLASMA

| Highest Dilution | Number of Specimens |
|---|---|
| 1-2 | 3 |
| 1-4 | 18 |
| 1-8 | 34 |
| 1-16 | 60 |
| 1-32 | 100 |
| 1-64 | 82 |
| 1-128 | 68 |
| 1-256 | 32 |
| 1-512 | 14 |
| Over 512 | 1 |
| Total | 412 |

Our method of removing the plasma has been to use a regular blood-taking set and by substituting a capillary or opsonic pipette for the needle adaptor the plasma can be aspirated into a regular transfusion flask, practically a closed system being maintained. Between 25 c.c. and 50 c.c. (about 1 cm.) of plasma will be lost because of cell contamination. If desirous of recovering this small amount, this thin layer of plasma could be transferred to one or two 50 c.c. centrifuge tubes and the cells thrown down. We have felt that the loss of this small amount of plasma was negligible compared with the labor necessary to recover it, together with the possibility of bacterial contamination, and have adhered to careful aspiration to the point where cells begin to be removed. Each flask will contain about 450 c.c. of plasma representing one liter of whole blood.

When the plasma is placed in the refrigerator a "plasma card" of characteristic color is attached, upon which the same information is recorded as upon the "recipient card" in the case of whole blood, except that in addition blood pressure readings taken before and after the transfusion are recorded. The same bookkeeping method is used as was described in blood banking except that when 450-500 c.c. of plasmas is dispensed, the service using it is charged with a liter of blood, making one set of books serve for both commodities.

### Technical Advantages of Plasma

The technical advantages of giving plasma are obvious. Firstly, it is a no more complicated procedure than giving glucose intravenously. Secondly, plasma can be administered without determining either the blood group of the plasma or of the recipient. Plasma which is capable of agglutinating the recipient's cells in vitro does not do so when administered intravenously because its agglutinins are thereby so diluted that its agglutinin titer falls to an impotent level. Table I illustrates the agglutinin titer which we found in 412 specimens of serum and plasma. Even plasma possessing a high agglutinin titer has not been found to produce an incompatibility reaction. In about one-half of our plasma transfusions, theoretically incompatible plasma has been given without the production of a single reaction. While we have determined the agglutinin titer of all plasma given, we consider it of no practical importance. It is preferable to pool two or more lots of plasma thereby reducing its agglutinin titer. This is particularly true if unlike types of plasma are pooled. In giving plasma, posttransfusion reactions are negligible and it can be said without reservation that the blood group can be disregarded. The time usually consumed by these laboratory procedures is thus saved, making plasma transfusions more adaptable to emergency situations.

**The use of plasma without regard for its blood group is based upon the same fundamental logic as the successful use of universal whole blood donors. The cells of group O blood contain no agglutinogens and plasma contains no blood cells. The two situations are identical from the standpoint of incompatibility, agglutination not being possible in either instance. Being able to disregard blood groups in giving either whole blood or plasma is a decided advantage considering the growing complexity of isohemagglutination and the recognition today of at least six types of blood.[8] The successful use of plasma without regard for its blood group should eradicate all remaining opposition to the employment of universal whole blood donors.**

An additional advantage of plasma over whole blood is the speed with which it can be given. We have no evidence that plasma can be given too rapidly. The majority of the plasma transfusions at this hospital have been given at the rate of 500 c.c. in less than twenty minutes, many in ten minutes and a few in five to seven minutes. Plasma, because of its lower specific gravity and viscosity runs through the needle

much more rapidly than does whole blood. In one instance 500 c.c. of plasma was given in twelve minutes, whereas, with the same needle, apparatus and giving conditions, the subsequent giving of 500 c.c. of whole blood required 88

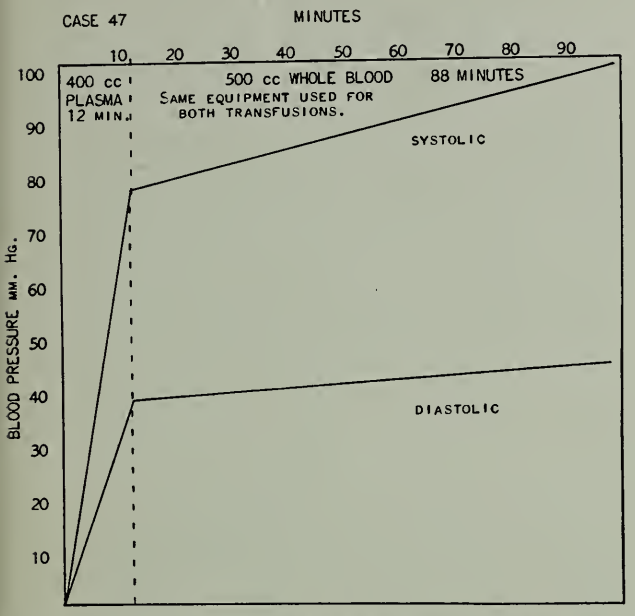


Fig. 2. Chart showing relative speed and therapeutic value of plasma and whole blood transfusion in a case of severe shock.

minutes (Fig. 2). Had this patient been forced to wait for an hour and a half to receive her first 500 c.c. of sustaining fluid, it is felt that the outcome might have been fatal.

## Summary

The plasma bank at Receiving Hospital has been the direct and natural out-growth of the blood bank and is rapidly assuming an important rôle in transfusion therapy. Nevertheless, there are sufficient indications for giving both whole blood and plasma to warrant the continuance of the two as integral parts of the blood bank set-up. Considerable reluctance, on the part of the clinical staff, to give plasma had to be overcome in the beginning. This same attitude was exhibited in the early days of the blood bank. However, once either bank is properly used and fully appreciated, any attempt at abolishment would probably meet with firm opposition.

The outstanding advantages of plasma transfusion are the speed and safety with which the plasma can be given and its greater efficacy in the treatment of such conditions as shock, burns, diabetic coma, et cetera. Here the double dosage of plasma is a great physiological and chemical asset, while blood cells are unnecessary.

One's thoughts naturally turn to the possibility and feasibility of further development of the plasma bank in the direction of seeking other sources of plasma or serum. Possibly the toxicity of animal serum for human administration has been overestimated or the serum could some way be rendered non-toxic. It has been stated by some that human blood serum is more toxic than plasma, some toxic substance or substances being formed or liberated during clotting. This has been disputed by others. Cadaver blood as a source of plasma and serum has to be considered. It has been shown that blood from the jugular vein of non-infectious individuals taken within a few hours after death is bacteria-free. As an extra precaution, Berkefeld filtration could be employed. These sources of plasma and serum probably would not have to be resorted to in civil practice, but the necessities of military practice should not be overlooked at this time.

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### SELECTIVE SERVICE REJECTIONS

Rejection of one-third of the men applying for army service in the New York area is remediable by medical care only to a small extent, according to the January issue of the *New York State Journal of Medicine,* official organ of more than 17,000 physicians of the state.

"The defects for which men are being rejected by the army examiners," *The Journal* says, "are those structural and psychologic weaknesses upon which the strenuous nature of field training could be expected to have a detrimental effect.

"The point of view of the army and of civilian medical examiners might be expected to vary considerably concerning the acceptability of certain risks and thus to account for the high percentage of rejections. They should not be taken too seriously even by constitutional pessimists. And, after all, what can be done for flat feet, bow legs, and perforated eardrums?"

Unfitness for medical service is not necessarily an index of health, according to *The Journal,* though "some of our socialist acquaintances start right away to yell louder for state medicine."—Medical Society of the State of New York.

# Rheumatic Fever

## Preventive Aspects*

By Herman H. Riecker, M.D.
Ann Arbor, Michigan

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■ RHEUMATIC fever is a specific contagious familial disease of childhood characterized usually by joint pains, mitral stenosis, chorea and fibroid nodules. However, the disease may occur insidiously without joint symptoms, chorea, or nodules, and since febrile illnesses with pharyngitis are not uncommon in children the probability of cardiac crippling may remain quite unrecognized.

Chorea in children may occur independently of rheumatic activity, one-half the cases studied by Coburn and Moore[4] in New York occurring in non-rheumatic subjects. Gerstley and associates[7] in Chicago, and Jones and Bland[9] in Boston found that many children with chorea did not have other rheumatic manifestations. Since almost one-half of the cases occurred in non-rheumatic subjects, each case of chorea must be differentiated with respect to possible rheumatic fever. The differential diagnosis will be mainly between encephalitis, hysteria, Huntington's chorea, chorea des degenère, nervous tics, congenital syphilis, and chorea gravidarum.

Between the ages of five and nine years, the onset of the rheumatic fever may be sudden, with severe pancarditis, or insidious, with fatigue, vague joint pains and mild fever. A constant apical systolic murmur may be the only evidence of damage to the heart since the presystolic murmur of mitral stenosis usually is absent before the tenth year. The child who tires easily, is losing weight, with a poor appetite, pallor and indefinite muscle pains should arouse the suspicion of the physician that he is dealing with the insidious form of rheumatic fever. Polyarthritis is not as frequent in childhood as in later life, and may be entirely absent. Non-rheumatic "growing pains" of childhood may be distinguished by the following: they occur at the end of the day and during the night in the muscles of the legs and thighs about the joints rather than in them. There is no heat, swelling or pain on motion.

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### Incidence

Predominantly a disease of childhood and early adult life, with slightly greater incidence in girls, it ranks first as a cause of death in girls in New York City and is second to accidents among boys.

**Its incidence in Michigan is unknown. The disease has been made reportable in the State for the purpose of determining the incidence and to permit more specific preventive measures.**

In Northern United States the incidence of rheumatic fever is estimated at between 1 and 5 per cent. Woofter's[16] careful studies in West Virginia indicate a higher percentage (4.4 per cent) than is usually found. Martin[11] estimates the national incidence at 800,000 to one million cases per year and an annual mortality of about 40,000. Martin followed 1,378 children for 18 years and found a mortality rate of 28.7 per cent. More than half these died within the first five years of their initial infection. Death occurs more commonly during the second or third attack, usually between five and twelve years of age.

According to Meakins[12] the disease is seven times more common in urban than in rural school populations. He writes that mitral stenosis is twenty times more frequent in Boston than in New Orleans, and fourteen times more frequent than in Dallas. J. T. Clarke[3] found no cases of mitral stenosis in thirty-three years in the tropics. In 571,526 out-patients from an estimated population of 33,748,569 he saw 747 cases of joint and other manifestations, with fever, obviously rheumatism, but no observable rheumatic heart disease.

### Environment

Sir Leonard Hill[8] discounts to some extent the effect of climate alone and writes that "the evidence shows that it is conditions produced by dirty, artificially-heated and ill-ventilated houses, and density of population which cause

rheumatic troubles, the ill-effect of these conditions being intensified by a diet in which protective foods are deficient." In England dampness of houses is considered the most important local environmental predisposing factor.

May Wilson[15] believes also that adverse local or home environmental conditions are extremely important because in New York the disease is so much more common among the lower than the higher economic classes. Swift, Wilson and Todd[14] find the disease about twenty times more common among the working classes than among the rich and agree that overcrowding, bad sanitation, dietetic insufficiency, and dampness are important predisposing factors. There is a marked seasonal variation, the disease being much more common in early spring when upper respiratory infections are prevalent.

### Familial Incidence

The familial incidence of rheumatic fever is interesting in that both a tissue susceptibility and a contagious factor may explain the occurrence of the disease in other members of the family in 50-75 per cent of the cases. Kaufmann and Scheerer's[10] contribution on the appearance of the disease in 72 pairs of twins supports the constitutional susceptibility factor, while such cases as Swift's support the purely infectious factor. In Swift's case of a child with repeated attacks, removal of badly diseased tonsils from the mother resulted in complete cessation of recrudescences of rheumatic fever in the child.

Gauld[6] and associates found in two generations a rheumatic family history 3.7 times as high in 96 rheumatic children as in the control families.

### Etiology

Rheumatic fever most clearly is an infection. It has been seen in epidemics, and its clinical features are those of infection. The hemolytic streptococcus is closely concerned as a precipitating agent but it has not been proved the cause of the infection.

The entrance of the infectious agent through the upper respiratory tract seems established. "One must appreciate," as Meakins[12] remarked, "that the whole mucous membrane of the fauces and pharynx is the probable portal of entry." Coburn and Moore[5] conclude that the "evolution of rheumatic fever consists of three phases: first, a phase in which there is fever and an infection of the respiratory tract with the hemolytic streptococcus subsiding in a few days; second, an afebrile, symptom-free phase in which the immune response develops in the rheumatic subject with a diminution of serum complement and, finally, the acute attack which is phase three." A month may elapse before the phase three appears.

### Tonsillectomy

It has been shown by numerous studies that tonsillectomy does not usually affect favorably the course of rheumatic disease, and may precipitate either a recrudescence, or rarely subacute bacterial endocarditis in a susceptible individual. Recrudescences occur in a high percentage of cases whether or not a tonsillectomy has been done.

In Baltimore, Allan and Baylor[2] found that in 108 patients subjected to tonsillectomy and adenoidectomy between 1910 and 1924, recrudescence had occurred in 43.5 per cent. Rachel Ash[13] concluded from a study of 522 children in Philadelphia that tonsillectomy did not prevent recurrences of rheumatic manifestation, nor did the presence or absence of tonsils have any demonstrable influence on the possible cardiac involvement. The infective agent seems to enter the body through the lymphoid tissue of the whole nasopharynx, of which tonsillar tissue is but a part.

**Tonsillectomy in the rheumatic child is indicated if there is definite disease of the tonsils, not alone because the child has the rheumatic tendency. If tonsillectomy definitely will improve the health of a child, it will be of value for the rheumatic child. No operative procedures should be carried out during the active phases of rheumatic fever.**

As Spaulding[13] has emphasized, the greatest harm has been done by thinking in terms of "acute" as applied to rheumatic fever. The preventive principles of tuberculosis would have been greatly retarded had we begun with the phrase "acute pulmonary tuberculosis." Preventive efforts have been long delayed by this application of the term to rheumatic fever.

### Activity of the Infection

**The activity of the rheumatic process may be evaluated by:**

**The fever, heart rate, and joint pains.**

**Number and appearance of the leukocytes.**

**The sedimentation rate.**

**General appearance of the child.**

**The presence of anemia, weight changes, and fatigue.**

A normal temperature with or without salicylates does not prove inactivity. The diagnosis of active rheumatic endocarditis may be difficult unless all the febrile states of childhood are kept in mind. The over-active heart with tachycardia, at times a gallop rhythm and soft sounds, accentuation of the second pulmonic sound, and a soft systolic murmur should be noted. Enlargement of the heart shadow by x-ray is valuable evidence, both in denoting activity and in following cases.

**The constant tendency for recrudescence with further cardiac damage makes prognosis difficult in any case. About 80 per cent of children having rheumatic fever develop rheumatic heart disease. The severity of the joint inflammation is no criterion of possible involvement of the heart, since the latter may occur without joint manifestations. In general, the later in life rheumatism manifests itself the less likelihood there is of rheumatic carditis and recrudescences.**

The rheumatic process should be considered active until proved otherwise. Exactly the same attitude should be maintained regarding activity as in tuberculosis in order to err on the side of safety. Prolonged rest in bed, well protected from upper respiratory infection, is as essential as for pulmonary tuberculosis and may prevent permanent disability.

The less common manifestations of rheumatism should be recognized such as mild chorea, erythema multiforme (annulare, marginatum, nodosum), and other toxic manifestations, anemia, epistaxis, sweating and fatigue. The first and often the only early symptom is fatigue.

Early recognition of the disease, that is, at the time of the initial tachycardia and fever, is important in a disease characterized by a prolonged course and frequent cardiac crippling. In the susceptible person frequent observation for activity should be made.

### Anticipation

Several factors of anticipation of the disease or its recrudescence in susceptible persons may be utilized:

(a) Children in Northern urban areas from the low income families contribute the great majority of cases.

(b) The local environment, particularly the factors of overcrowding, dampness, and poor food are contributing factors.

(c) Children of families in which streptococcic infection, tonsillitis and scarlet fever are occurring, and those in which even distant relatives have rheumatic heart disease should be particularly observed.

(d) Hemolytic streptococcic infections in other members of the family may initiate an attack in a susceptible child. The immediate isolation of upper respiratory tract infections in susceptible families is therefore advisable.

### Preventive Aspects of Rheumatic Fever

The care of the quiescent rheumatic patient is of special importance and here the principle of the menace of the herd is used.

(a) The disease should be considered contagious.

(b) Preventive measures may take the same form as in tuberculosis.

(c) The rheumatic child is "a crippled child who does not limp." The advantages of special hospitals similar to those now used for tuberculosis should be recognized.

(d) A person who has once had rheumatic fever is always susceptible to subsequent attacks.

(e) The encouragement when feasible of migration of susceptible families to a southern climate, or at least the avoidance of dampness and chilling.

(f) The use of small doses of sulfanilamide or related compounds as a prophylactic during the winter months has been suggested.

(g) These drugs should not be used during an acute phase of the disease.

(h) The person with mitral stenosis must be protected from colds and sore throats in other members of the family, in schoolmates and attendants. The disease is not only initiated by upper respiratory infection in one-half of the

cases, but recrudescence occurs in one-half the cases following a cold or sore throat. *Chilling, psychic trauma, and minor operations may precipitate an attack.* These children should be in bed during the time of any respiratory infection.

(i) Rheumatic children should be guarded with respect to exercise and their activities constantly directed to sedentary interests. Rest periods during the day and warm sleeping rooms should be provided.

(j) The food intake is best managed by insuring adequate vitamins and minerals and the avoidance of overweight and underweight.

(k) The mental hygiene aspects of a child afflicted with rheumatic heart disease deserves special attention because of the possibility of creating additional disability through an inferiority complex. Frank discussion with the parents usually prepares for a satisfactory life adaptation in individual cases.

(l) Allergic children are unusually susceptible to upper respiratory infection. A careful family history, examination of the nasal mucosa, and a determination of eosinophilia in blood and nasal secretions is helpful. If the rheumatic child exhibits nasal or bronchial allergic changes, a thorough study directed toward its control might be of value in limiting the susceptibility to the rheumatic process.

(m) In any family, a member of which has had rheumatic fever, cultures on a blood agar plate of the nasopharynx of all members of the family and other contacts should be carried out during the winter. Protection against the hemolytic streptococcus "carrier" is essential to the prevention of recurrences in children susceptible to rheumatic fever.

The similarity of rheumatic fever to tuberculosis in its familial incidence, its relation to poverty, its tendency to attack the young, its constant recurrences with mental or physical strain, surgical procedures, or exposure to cold, its peculiar immunological reactions, and the standard procedure in treatment should be of value in a better appreciation of the preventive aspects of the disease. Finally, rheumatic fever should be more frequently suspected by the physician in dealing with any indeterminate infection of childhood.

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### MICHIGAN'S SANATORIA

Citizens of Michigan may well be proud of their tuberculosis record—for this state is now among the leaders in case-finding, treatment and hospitalization for the tuberculous.

Individual effort and organized campaigns have helped to reduce the state tuberculosis death rate almost 60% since the beginning of the century. For 34 years the Michigan Tuberculosis Association has been carrying on educational and actual case-finding programs. At the present time the Michigan Sanatorium Association is voluntarily conducting a survey in order to improve the already high standards of tuberculosis treatment in state approved sanatoriums. Through effective laws, the legislature has been able to make hospitalization and treatment available to rich and poor alike.

Figuratively, Michigan is now on the last lap. Actually, there is much to be done. Last year 6,119 active cases of tuberculosis were reported in the state, and it is estimated that there were around 12,000 unknown cases. The goal of tuberculosis care is "hospitalization and treatment for every known case."—*Health,* Jan.-Feb., 1941.

# Clinico-Pathological Conference

## Detroit Receiving Hospital

## January 16, 1941

P. T., a colored man, thirty-eight years of age, was admitted to the hospital on July 19, complaining of weakness and cough of three weeks' duration.

*Present Illness.*—This patient had had a number of previous admissions to Receiving Hospital for the treatment of his diabetes which was known to have existed for five years. He had not followed his diet and insulin requirements consistently partly because of financial difficulties. His last previous admission was in May, 1940, when he had experienced increased thirst, polyuria, and loss of weight apparently because he had not been able to follow his diet. He was discharged from the hospital on a daily dosage of 40 units of protamine insulin and a diet containing 150 grams of carbohydrate, 75 grams of protein and 120 grams of fat. He left without the sanction of his doctor and the diabetes was not completely controlled. He continued to feel poorly and was unable to work. About three weeks before his present admission be began to notice marked fatigue on any exertion, had drenching night sweats and felt feverish during the day. A week later a cough which he had paid no attention to previously become more marked and productive of moderate amounts of greenish mucopurulent sputum. He did not complain of polyuria, polyphagia, polydypsia, or drowsiness.

*Past History.*—General health good. No serious illnesses. No history of venereal disease. No operations. Blood pressure of 190/130 recorded on admission in May, 1940. Review of history by systems incomplete.

*Familial History, Marital History and Occupational History*: Not remarkable.

*Physical Examination.*—Revealed a slender, emaciated, acutely ill, colored male. Mental state clear. Temperature 102°, pulse 120, respirations 25. Eyes: ocular pupils equal and regular reacting promptly to light and upon accommodation. Ocular fundi showed moderate narrowing and sclerosis of the retinal arterioles. No hemorrhages or exudates. Ears, nose and throat: not remarkable. Neck: no cervical rigidity. No enlargement of thyroid gland. No cervical or other lymphadenopathy. Lungs: dullness to percussion over the right apex anteriorly and posteriorly. Bronchial breathing, increased tactile fremitus, bronchophony and numerous medium crepitant râles over this area. Scattered crepitant râles over remainder of right lung field and at left base. Heart: apical impulse visible and palpable in fifth intercostal space in the mid-clavicular line. Heart sounds of good quality without audible murmurs. Blood pressure 140/90. Abdomen: liver, spleen and kidneys not palpable. No masses, tenderness or rigidity. Extremities: radial arteries slightly thickened. Tendon reflexes normal. Rectal and genitalia: negative.

*Laboratory Tests.*—See table. Other Laboratory Findings: urinalysis: specific gravity quantity not sufficient, sugar O, albumin trace; sediment—one leukocyte per h.p.f. Blood: Hemoglobin 9.5 grams; erythroctyes 3.46 millions; leukocytes 6,600; neutrophiles 72 per cent, filamented 42 per cent, non-filamented 30 per cent, eosinophiles 1 per cent, lymphocytes 26 per cent, mononuclears 1 per cent. Kline test negative. Roentgenograms to be reported.

*Clinical Course.*—Patient's temperature remained consistently elevated, rising gradually to a peak of 105°. The pulse rate ranged between 110 and 130. Respirations gradually rose from 25 to 35. On the morning of July 20, patient had what was apparently a hypoglycemic reaction for which 50 c.c. of 50 per cent glucose were given intravenously. Another similar attack occurred at 8:00 p. m. on July 20. At 2:00 a. m. on July 21 patient was seen in a tonic convulsion and unconscious mental state which responded within four minutes to the intravenous injection of 40 c.c. of 50 per cent glucose. Again at 4:30 a. m. he relapsed into a stuporous condition which again responded quickly to 50 per cent glucose. Because of this recurrence he was given 1,000 c.c. of 10 per cent glucose intravenously slowly. At 9:00 a. m. and 11:00 a. m. less severe hypoglycemic symptoms occurred which were controlled by oral administration of coma feedings. At 3:30 p. m., the patient had an attack consisting of clonic convulsion of all extremities with twitchings of the facial muscles, accompanied by lack of response to external stimuli, groaning and turning of the head to the left. The skin was described as hot and moist. He remained unconscious for about thirty minutes following which he gradually regained consciousness. Similar unconscious episodes occurred at 6:45 p. m. and again at 2:00 a. m. on July 22. During the afternoon on July 22, another similar episode occurred the patient responding again to intravenous glucose. At 6:00 p. m. while the patient was talking to his wife he had a sudden convulsion and expired in a few minutes.

### Discussion

Dr. Richard McKean: This patient had a number of previous admissions to this hospital, and there is no question that he had true diabetes mellitus. We have all of the evidence necessary to establish an undoubted diagnosis of that particular condition. The story of his present illness indicates that he has developed a complicating disease, but does not give any definite information concerning its nature. Cough is a prominent feature of his illness, but the type of sputum is not characteristic enough to be of any help in deciding what the source of this is. Likewise, it was apparently impossible to get an accurate history of

| Date | Time | Insulin | Blood Sugar | $CO_2$ | Urine Sugar | Diacetic Acetone | Feedings |
|---|---|---|---|---|---|---|---|
| 7/19/40 | 4:30 p.m. | | | | blue | | *coma feeding |
| | 9:00 p.m. | | | | blue | | coma feeding |
| 7/20/40 | 7:00 a.m. | U 40 (prot.) | | | | | |
| | 7:30 a.m. | | | | green | negative | |
| | 9:30 a.m. | | 34 | 58 vol. % | | | 50 c.c. 50% glu. IV |
| | 11:30 a.m. | | | | green | | *diet |
| | 4:30 p.m. | | | | green | | diet |
| | 7:00 p.m. | | | | | | 50 c.c. 50% glu. IV |
| | 8:00 p.m. | | | | green | | coma feeding |
| 7/21/40 | 2:30 a.m. | | 20 | 52 vol. % | | | 40 c.c. 50% glu. IV |
| | 4:30 a.m. | | | | | | 50 c.c. 50% glu. IV<br>100 c.c. 10% glu. IV |
| | 7:30 a.m. | U xv (reg.) | | | yellow | negative | diet |
| | 9:00 a.m. | | | | | | coma feeding |
| | 11:00 a.m. | | 66.2 | | | | coma feeding |
| | 11:30 a.m. | | | | yellow | | diet |
| | 3:30 p.m. | | 26 | | | | 50 c.c. 50% glu. IV |
| | 4:00 p.m. | | | | | | coma feeding |
| | 4:30 p.m. | | | | unable to obtain spec. | | diet |
| | 7:00 p.m. | | | | | | 100 c.c. 50% glu. IV<br>coma feeding |
| | 8:30 p.m. | | | | yellow | | coma feeding |
| | 2:00 a.m. | | | | green | | 100 c.c. 50% glu. IV |
| | 4:00 a.m. | | | | | | each coma feeding |
| | 6:00 a.m. | | | | | | each coma feeding |
| 7/22/40 | 7:30 a.m. | | | | green | negative | |
| | 8:30 a.m. | | | | | | coma feeding |
| | 11:30 a.m. | | | | orange | | diet |
| | 3:30 p.m. | | 18.5 | | | | 50 c.c. 50% glu. IV |
| | 4:00 p.m. | | | | | | 50 c.c. 50% glu. IV<br>1000 c.c. 10% glu. IV |
| | 4:30 p.m. | | | | unable to obtain spec. | | |
| | 6:00 p.m. | Expired | | | | | |

the diet which he had been following, or to know whether he had been taking insulin regularly. This leaves us in the dark as far as being able to estimate how well or how poorly his diabetes may have been controlled. However, judging from the lack of polyuria, polyphagia, polydipsia and drowsiness it was not a diabetic acidotic state which caused his entry on this admission.

The examination of the ocular fundi bear out the previous finding of hypertensive vascular disease. The chest findings indicate a consolidation of the left upper lobe which could be either a tuberculous process, possibly with cavitation, or an apical lobar pneumonia. The considerable drop in blood pressure from a previous reading of 190/130 to 140/90 may be merely secondary to his general state of malnutrition but may, on the other hand speak for more than meets the eye. Aside from the laboratory work pertaining to blood sugar and urine, the most significant finding is the absence of leucocytosis. Although we have had a number of cases of pneumococcic pneumonia with perfectly normal leucocyte counts, and some with frank leucopenia, such a definite lobar involvement as was found in this case is usually accompanied by leukocytosis. Therefore, this is a point in favor of pulmonary tuberculosis, and combined with a history of a chronic cough and night sweats, in a colored patient with diabetes makes this the most probable cause of his pulmonary disease.

The low blood sugar levels, the absence of appreciable glycosuria in spite of the small amount of insulin and the large amounts of dextrose which were given intravenously and orally to this patient represent just the opposite effects from what we would expect in a moderately severe diabetic. The explanation of this paradox is the chief problem in this case. I have never seen this occur in the course of combined diabetes and pulmonary tuberculosis, although we have followed some 220 cases of this type at Herman

Kiefer Hospital during the past ten years. Usually their diabetes becomes more severe because of the accompanying infection. Occasionally, as in any diabetic, failure to eat while continuing to take insulin will result in hypoglycemic reactions. However, this man, who in thirty-six hours had no insulin, kept on having steadily decreasing blood sugar levels down to 18.5 mg. per cent.

What are some of the causes of hypoglycemia which we might consider? First, there is true hyperinsulinism, which can be caused either by overdosage of parenterally injected insulin, or by diffuse hyperplasia, an adenoma, or a carcinoma of the islet tissue of the pancreas. These pathologic states represent islet tissue and function gone wild, producing more insulin than is needed for the normal metabolic processes. This, to my knowledge, has never occurred in patients who were previously diabetic, presumably with hypofunctioning islet tissue, and therefore is unlikely in this case. All other types of hypoglycemia are not due to hyperinsulinism, unless one assumes that hyperfunction may occur in the absence of pathologic changes in the pancreas. Hepatic disease of various types including toxic cirrhosis, diffuse carcinomatous involvement, the so-called fatty metamorphosis of the liver, or in fact, any disease which affects widely the liver parenchyma may be accompanied by hypoglycemia. The explanation of this type of hypoglycemia is to be found in the disturbance of a normal physiologic mechanism through which the blood sugar is controlled. Normally, when there is an increased demand for glucose and a tendency for the blood sugar to fall, the conversion into glucose of glycogen stored in the liver is accelerated. This acceleration is caused by a reflex stimulation of the splanchnic nerves which act on the liver directly and also indirectly by the production of increased amounts of adrenalin. If the store of glycogen in the liver is depleted by disease this mechanism cannot operate and hypoglycemia may result. A valuable aid in excluding this type of hypoglycemia is the subcutaneous injection of adrenalin. This will cause a prompt rise in blood sugar if the liver stores of glycogen are normal. In this case there is no evidence of hepatic disease—jaundice is absent, and the liver is not demonstrably changed in size. There was apparently not sufficient opportunity to study liver function. Dr. Max Pinner, formerly the Pathologist at Herman Kiefer Hospital, has frequently found fatty livers in patients dying from tuberculosis. A similar type of involvement is occasionally seen in diabetes, especially when it is not well controlled. Such a change may possibly be present in this case. Diffuse carcinomatous involvement could be present without jaundice, but such a diagnosis in a patient of this age without other evidence of carcinoma would be sheer speculation. Hemochromatosis should be mentioned although the lack of hepatic enlargement as well as the absence of abnormal pigmentation of the skin tend to exclude this disease. A more likely condition would be a chronic hepatitis or cirrhosis.

Another cause of hypoglycemia is the absence or diminution of the internal secretion of the anterior pituitary, the thyroid, or the cortex of the adrenal glands. These products normally oppose the action of insulin and their lack may lead to hypoglycemia even when the insulin production is normal. Basophilic adenomas of the pituitary are often accompanied by hypertension, hyperglycemia and glycosuria, the two latter being due to an excess of the diabetogenic hormone. The exact mechanism of the effect of this hormone is not known, although there is good evidence that it may exert its effect through the adrenal cortex. It is possible to hypothecate the development of hypopituitarism later in the course of this disease due to destruction of normal pituitary substance and thus to explain this patient's previous hypertension and diabetes with the later fall in blood pressure and the appearance of hypoglycemia. However, he did not show at any time the characteristic obesity of patients having basophilic pituitary adenomas, his diabetes was more severe than that usually seen in this condition and a subsequent hypopituitarism, while it occurs commonly in other pituitary tumors, must be either non-existent or very unusual in Cushing's disease because of the usual small size of basophilic adenomas. Therefore, if a pituitary lesion is present, it is either one of the other types of pituitary tumors, or destruction of the pituitary from hemorrhage or unexplained atrophy. I have never seen hypothyroidism produce hypoglycemia of this severity. Furthermore, there was no evidence of myxedema. This patient might be considered to be a candidate for Addison's disease. The chief thing against adrenal insufficiency as a factor in his

hypoglycemia is the blood pressure reading of 140/90.

Certain lesions of the central nervous system may show glycosuria. Although this man had definite evidence of central nervous system involvement as indicated by convulsive seizures, these were undoubtedly caused by the hypoglycemia rather than being the cause of his disturbed carbohydrate metabolism. Finally, the most common cause of hypoglycemia is the so-called functional hypoglycemia. Its etiology is unknown. It never causes as low blood sugar levels as were present in this case. Dr. Conn of Ann Arbor has described beautifully these various types and their treatment in a recent volume of the *Journal of the American Medical Association.*

In summary, the following diagnosis should be made in this case:

1. Diabetes mellitus.
2. Pulmonary tuberculosis, probably with cavitation.
3. Hypertensive vascular disease.
4. Cerebral damage secondary to hypoglycemia.
5. Hypoglycemia due (in order of probability) to (a) diffuse hepatic disease, cirrhosis, or fatty metamorphosis; (b) pituitary insufficiency, from pituitary tumor, or atrophy; (c) Addison's disease.

Dr. Robert J. Schneck: Doctor McKean has given a very complete discussion of this case, and I have very little to add. I agree with his opinion that pulmonary tuberculosis is the best explanation of the findings in the chest. The suddenness of the onset of the hypoglycemia as well as the absence of findings implicating the liver or the adrenal glands in my opinion favor a destructive lesion of the pituitary. A tuberculoma of the brain associated with the pulmonary tuberculosis is a possible cause. A metastatic abscess of the brain secondary to a pulmonary abscess is a possibility which also should be mentioned.

Dr. A. Hazen Price: This series of events leading to this patient's death might be reconstructed as follows: he originally had diabetes and then developed a respiratory infection. The latter was probably tuberculous in nature, but may have been entirely non-tuberculous, or tuberculosis with a superimposed acute pulmonary infection. Also, I believe he probably had some type of chronic hepatic disease—chronic hepatitis, a fatty liver, or, less likely, tuberculosis of the liver. This may not have been very extensive, and the respiratory infection may have acted to change the state of the liver from one of low reserve to one with some degree of hepatic insufficiency, leading to hypoglycemia. In this sense, the respiratory infection may have been the last "straw which broke the camel's back." The lack of evidences or hepatic disease is somewhat against this course of events. Pituitary or adrenal insufficiency may have been present. However, I believe the former explanation best fits this case.

Dr. Martin Schaeffer: I agree with Doctor McKean's diagnoses. Amyloid disease of the liver should be mentioned because of the probability that he had pulmonary tuberculosis. We have a patient suffering from chronic pancreatitis who developed rather severe hypoglycemia each time he experienced a flare-up of this condition.

### Roentgenologic Findings

Roentgenogram of the chest taken July 20, 1940 showed consolidation throughout the entire right upper lobe, most of the right lower and the mid-portion of the left lung field. The remainder of the lung fields were clear. The costophrenic sinuses were clear.

The appearance was that of a rapidly advancing bilateral tuberculosis.

### Pathologic Findings

*Final Diagnosis.*—(1) Tuberculous pneumonia, right upper lobe; (2) pancreatic fibrosis secondary to calculous obstruction of pancreatic duct.

The pituitary, liver, thyroid and adrenals were normal. The right lung weighed 1,240 grams and the left lung 400 grams. The right upper lobe was completely consolidated. The microscopic picture was that of acute tuberculosis with coalescence of tubercles, extensive necrosis and leukocytic exudation.

The pancreas was uniformly small, extremely firm and white and measured 2 cm. in diameter. The duct system was dilated throughout and contained innumerable calculi, some very small. One large calculus obstructed the duct of Wirsung at its distal extremity. The pancreas was carefully searched for a neoplasm and none found. Microscopic examination of the pancreas revealed extensive fibrosis with fibrous replacement of practically all of the acinar tissue as well as duct dilatation. The islets of Langerhans were conspicuously well preserved, many hypertrophied, some being two and three times the size of normal islets. It was impossible to prove that there was actual

Fig. 1. Photomicrograph of pancreas (X 300). Duct dilatation and almost complete fibrous replacement of lobular tissue.

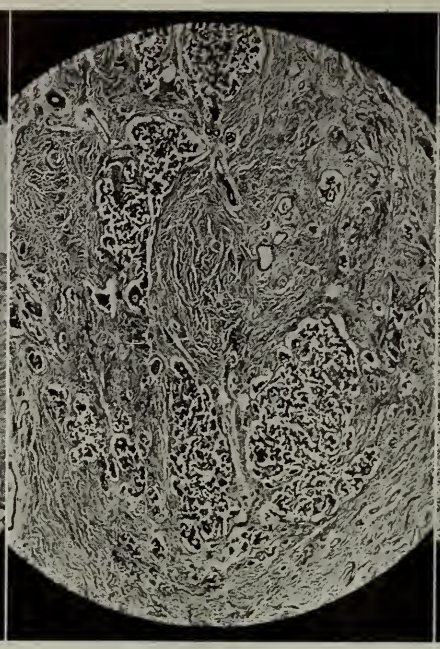

Fig. 2. Photomicrograph of pancreas (X 300). Islet hypertrophy. Apparent increase in islet tissue.

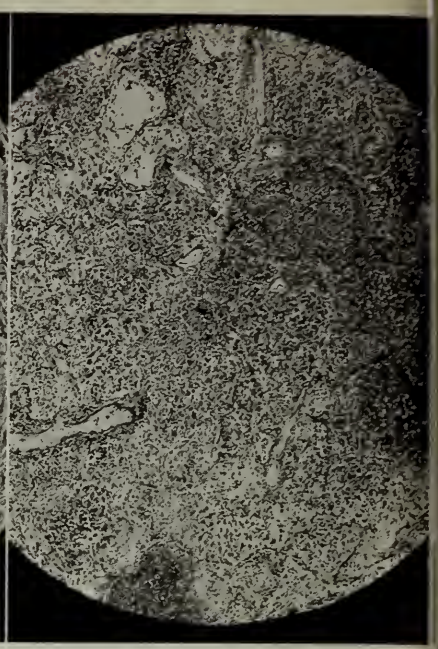

Fig. 3. Photomicrograph of lung (X 300). Pneumonic consolidation due to acute tuberculous infection. Characterized by exudation and necrosis.

hyperplasia of islet tissue because of the disturbance in normal architecture in the pancreas, but the hypertrophy of many of the islets would indicate an actual increase in the total number of islet cells. It seems fairly reasonable to explain this patient's hypoglycemia on the basis of hyperinsulinism.

Dr. Paul H. Noth: The pathologic studies in this case, as in a definite proportion of cases of hypoglycemia which have been reported, failed to disclose a definite cause. It did, however, reveal the clinically unsuspected and extremely interesting findings of chronic pancreatitis and pancreatic lithiasis, and it also practically excluded a number of the conditions mentioned in the clinical discussion which was, in the absence of diagnostic clinical evidence, necessarily speculative in nature. The relation of pancreatic lithiasis to diabetes is probably based upon the presence of chronic pancreatitis in this condition. A review of the literature in 1928 resulted in the discovery of 104 cases with pancreatic calculi. Of seventy cases with adequate clinical data twenty-four showed diabetes or glycosuria. Chronic pancreatitis without demonstrable calculi is also not infrequently accompanied by glycosuria. The observation of the development of diabetes following acute pancreatitis is quite infrequent. Warfield, in 1927, reported seven such cases which he found in the literature and added four of his own. This was a permanent diabetes in the five cases in which a subsequent history was obtained. In this case, hepatic, pituitary and adrenal lesions were absent. The marked destruction of the acinar tissue recalls the similar case reported by Barron in 1920, which led Banting to ligate the pancreatic duct in animals thereby producing an atrophy of the acinar and duct tissue and discovering another link in the chain of evidence indicating that the islet tissue is the source of insulin. There is some inconclusive evidence that this condition of the pancreas in animals may lead to hyperplasia of the islet tissue and cause hyperinsulinism. Such a mechanism may have been present in this case.

## VITAMINS PREFERABLE IN NATURAL FOODS

In the treatment of deficiency states the most important factor is a well-balanced, adequate diet, which can be supplemented when necessary by preparations containing vitamins and minerals in concentrated form. Too much emphasis cannot be placed on giving these substances in the form of natural foods. Minot says: "Today's knowledge does not permit us to prescribe with precision the amounts of the thirty-six or more substances which are required for correct nutrition. To detect deficiencies and remedy them piecemeal by supplements of manufactured concentrates will not at present solve the problem. Experience tells us that a mixed diet of natural foodstuffs, one especially rich in milk, green vegetables, fruit, butter, eggs, and food with ample protein of good biologic value, gives the best results." —*Citrus Fruits and Health.*

# Pituitrin in Postpartum Hemorrhage

## Transabdominal Intra-uterine Injection

By Donald F. Hoyt, M.D.
Pontiac, Michigan

D. F. Hoyt, M.D.

*M.D., University of Michigan, 1925. Member of the Staff of Pontiac General Hospital. Courtesy member of St. Joseph's Hospital. Chairman of Record Committee and member of Advisory Committee of Surgical Section at Pontiac General Hospital. Member of the Michigan State Medical Society.*

■ The surgeon performing a Cesarean Section commonly injects pituitrin directly into the wall of the uterus after the baby and placenta have been delivered. He does this to produce rapid, complete hemostasis by uterine contraction. An opposite picture is presented to the obstetrician once in every 150 labors immediately postpartum—uterine atony. Intractable hemorrhage results. Why does the obstetrician fail to practice what the surgeon finds so successful?

### Method of Injection

Recently, while attending a case of postpartum hemorrhage due to uterine atony, routine administration of oxytocics failed and the idea above cited occurred. One hand was placed behind the uterus, pushing the fundus sharply up against the anterior abdominal wall. Any trapped intestinal loop would thus be thrust aside. The bladder was empty or a catheter would have been inserted to outline its position for safety. By means of a No. 22 spinal puncture needle 1 c.c. of pitocin was injected in the uterine muscle, trans-abdominally. The result was immediate and spectacular. The uterus became exceedingly firm and contracted. The patient began to groan with the pain of contraction. Inspections at fifteen-minute intervals revealed slightly lessened but very effectual constant contraction. In two hours there had been no additional bleeding. This treatment was preceded by one transfusion and followed by two. Trendelenburg position and external heat were also employed. The patient was discharged in four days via ambulance to a convalescent hospital. Of some interest is the fact that she entered the hospital with a hemoglobin of 36 per cent, had postpartum hemorrhage over a period of seven hours before the treatment just described was employed, had transfusions totaling 1,100 c.c., and was discharged with a hemoglobin of 42 per cent.

### Usual Treatment

In presenting this method of treatment it is not intended to find a substitute for good conservative methods, but rather to replace some of the more drastic ones hitherto employed in intractable cases. The therapy of postpartum hemorrhage may be discussed under four headings:

1. General or supportive measures such as transfusions, infusions, Trendelenburg position, heat and uterine massage.

2. Conservative active measures now recognized as being safe and necessary. In the past fifteen years universal agreement has been reached in regard to entering the uterus manually to inspect or remove retained placental tissue. This is a procedure to be carried out early in postpartum hemorrhage. In the past five years the efficacy of ergot preparations intravenously has been repeatedly demonstrated. Many methods of bimanual compression of the uterus have been offered. They merit attention because they are harmless.

3. However, even with those aids, uterine atony is uncontrolled in one out of every 150 labors. For this group of cases hot and cold intra-uterine douches, even cracked ice, and intra-uterine packs have been used. Discussion is still rife as to their relative merits, and there is no agreement as to their efficacy or safety. Here it is where trans-abdominal intra-uterine injection of pituitrin should be given its chance. Of the six writers mentioning this method none

have reported failure in obtaining vigorous uterine contraction.

4. Where all these methods fail to control bleeding the sinister names of Momburg's tube, Sehrt's compressor, Henckel's clamp, and hysterectomy appear. They are usually pre-mortem measures.

### Intra-uterine Injection

Dr. F. Carreras of Barcelona in 1928 was the first to mention intra-uterine injection in postpartum hemorrhage. He told of Dr. Esquirel having discovered it in Buenos Aires. Torrents in 1930, also of Barcelona, reported seven cases in which he used this treatment, six recovering, one dying of "bulbar embolism." Torrents credited Dr. Esquirel. A minor reference in 1933 is the only allusion to it in the medical literature of this continent. The author J. E. Green apparently had not heard of its use before. Rawson, reporting a case in 1935, obviously had not heard nor read of it. Ravina, and especially Moir, speak most highly of their personal results with this method. Moir, by means of a movie camera and a device strapped to the abdominal wall, showed the speed of action of oxytocic drugs administered by various routes.

| Route | Elapsed time before effect |
|---|---|
| 1. Orally | 5 to 10 minutes |
| 2. Intramuscularly | 3½ minutes |
| 3. Rectally | 3 to 10 minutes |
| 4. Intravenously | 45 seconds |
| 5. Intra-uterine | 15 seconds |

Although speed is important, the vital point is that all the drug is introduced directly into the incompetent organ. Pointedly, at least in the atonic uterine states, these drugs have a much more decisive action when injected locally than when introduced in any other manner.

### Summary

Recent years have witnessed important advances in the treatment of immediate postpartum hemorrhage. Uterine atony still persists in one out of 150 labors. Trans-abdominal, intra-uterine injection of pituitrin is advanced as being the method of choice in treating these cases. Forty-two references were reviewed. Four, all European, were solely concerned with this method. Only two others mentioned it, one being in the American Medical Literature.

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President, Michigan State Medical Society.

*President's*

*Page*

# EDITORIAL

## REPORT RHEUMATIC FEVER

■ The present regulations of the Michigan State Health Department require that all cases of rheumatic fever shall be reported. While there are many men who have done special work in the "killer of children" and believe it to be a contagious disease, the question is still debatable. However, the conscientious coöperation of physicians in reporting all of these cases will give much added light to this question, particularly at the present time when we are always interested in medical defense. It is common knowledge that heart disease was the leading disability of Michigan men selected for military service in the First World War, and the largest number of these dated back to rheumatic fever.

At the request of the subcommittee on Heart and Degenerative Diseases of the Michigan State Medical Society, Herman H. Riecker, M.D., of Ann Arbor has written a short article on "The Preventive Aspects of Rheumatic Fever" which will be found on page 208. If every physician knew and made use of the knowledge contained in this article a great many of the deaths and disabilities could be prevented.

Doctor Riecker believes that rheumatic fever and hemolytic strep infections are more of a menace now than tuberculosis and since the diseases have similar social and medical implications he would like to see plans made to use any vacated space in these hospitals for the care of indigent rheumatic children. He says that recent reports indicate that a great deal more can be done by isolation of active cases in restoring health than was formerly thought possible.

Your first step in aiding in the prevention of rheumatic fever is to report every case.

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## GENERAL PRACTITIONER

■ In an editorial in The Journal for September, 1940, reference was made to the ideology of certain groups of specialists in which the general practitioner was viewed as an agent rather than employer of the specialist.

The report of the Graduate Commission which initiated that editorial has also stimulated quite general comment as to means of protecting the man in the field from this short-sighted reversed domination. Some of the "throw-away" type of journals have made use of the aroused interest to attack the set-up of the American Medical Association, pointing out the predominance of specialists in the controlling positions of the national organization. It is hard to conceive, even if this were true, that these men have other than the best interests of the medical profession at heart in their deliberations and decisions. Nevertheless, it is easy to lose sight of the general practitioner's problems. They often seem trivial to those whose view-points must include the broad picture of medicine as a whole. Just as one or two pin holes do not destroy the beauty of a great picture, enough pin pricks do irreparable damage and something valuable is lost forever. Therefore, it would seem worthwhile to repair the pricks in the morale of the profession as well as to prevent further irritating practices before a rift may be caused in the unified profession.

It seems to be a challenge to the officers of the A.M.A. and the delegates thereto. One possible remedy might be the inclusion of a practicing general practitioner on each of the specialist boards. There are many of these men, the type of physician who has a broad viewpoint of medicine as well as a personal knowledge of the practitioner's problems. Another remedy which has been frequently mentioned is the establishment of a general practice board. This may have merits though its function seems rather obscure. Possibly this board, acting as a liaison group between the profession in general and the specialists, would render yeoman service. The mechanism is not of serious consequence. The result must be accomplished; that is, the family physician must be preserved if the private practice of medicine is to be continued; to preserve the family physician he must be encouraged in the *general* practice of medicine. The specialist must be his advisor and councilor; a specialized instrument to be used for the special case by the general practitioner who should be educated as to how, and when, and where to use this instrument.

# THE MEDICAL PROFESSION AND SELECTIVE SERVICE

As Michigan physicians progress in the Selective Service examinations, some interesting facts about venereal disease are already becoming apparent. The incidence of syphilis among registrants examined so far is two per cent. Twenty-six thousand Kahn specimens have been run at the State Health Department Bureau of Laboratories, and 535 positive specimens have been reported. We anticipate that this figure of two per cent may actually decrease a little as time goes on.

The incidence of gonorrheal infection has been surprisingly small. We have found among colored registrants, however, that about 80 per cent of them give a history of having had gonorrhea.

The part that the medical profession of Michigan is playing in Selective Service is becoming increasingly important as the number of physicians who have accepted appointments with the Selective Service increases. On February 20 there were 890 doctors assigned to Local Boards as examining physicians, and 289 serving as members of Medical Advisory Boards. The appointment of at least 150 other physicians is being arranged in Washington at the present time. Recently a field representative from National Selective Service Headquarters at Washington visited the State and very highly praised the medical men of Michigan for the part they are playing in National Defense through the Selective Service System.

The first call for servicemen in November resulted in the rejection of 19.2 per cent at the induction centers because of physical reasons. During January the rejections dropped four per cent at the induction centers, and the figures are not entirely complete as THE JOURNAL goes to press. The leading major cause for rejection still remains *dental* deficiencies; and the second is faulty vision. More complete figures will be released as soon as the second call for men is completed.

There is considerable agitation and anxiety over the question of deferment of medical and dental students. We have had no further information from Washington that would change the original status of the regulations as issued last September. However, experience has shown us that few of these men will be called for service at one time, and that the Local Boards are inclined to delay the call of junior and senior medical students until they have completed the first year of internship and qualified for their license to practice medicine. Medical students are granted deferment by the law until the first of July, 1941. Beyond that time they must individually request deferment on an occupational basis in Class II as being engaged in an occupation essential to National Defense. At the present time there is little likelihood that the supply of either interns for the hospitals of Michigan or students for the medical schools will be seriously interrupted.

LT. COL. HAROLD A. FURLONG, M.D.

State Medical Officer, Mich. Selective Service.


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Mount Clemens—March 26, April 2, April 9, April 16

Traverse City-Cadillac-Manistee-Petoskey—March 28, April 4, April 11, April 18

The program will be mailed to physicians in the state within a few days.

**For further information, address:**
Department of Postgraduate Medicine
1313 Ann Street
Ann Arbor, Michigan

# MICHIGAN MEDICAL SERVICE

This month marks the start of the *second* year of operation of Michigan Medical Service. The farsightedness of the medical profession in Michigan in promoting a wider distribution of medical care and better public relations by the organization of this non-profit medical service plan has been generally recognized. Committees or representatives from medical societies in nine states have come to Michigan to learn what Michigan Medical Service is doing. Also numerous requests for information from medical groups throughout the country have been received by mail.

### The Second Year

The second year of operation of Michigan Medical Service should be even more successful because future actions can be based on actual experiences. With the splendid support of 3,387 participating doctors of medicine—three-fourths of the total possible number—it stands to reason that the medical service plan in Michigan can be developed to a most satisfactory program for the benefit of patients and doctors alike.

All doctors who have not yet sent in their Application for Registration with Michigan Medical Service should do so promptly in order that the public (not to mention politicians or other interested groups) may see that the medical profession is united in its endeavor to provide a means for persons with limited incomes to obtain medical services.

### Medical Service Plan

During the first year, the enrollment in the Medical Service Plan has more than tripled. At present, over 5,300 persons are enrolled in this complete Medical Service Plan. Already there are indications that more and more persons are becoming aware of the value of budgeting in advance for necessary medical services in the home and the office, as well as for medical and surgical care in the hospital.

In addition to the committees and officers of Michigan Medical Service, many doctors serving on special committees representing the various fields of medical practice—the Michigan Dermatological Association, the Michigan Branch of the American Urological Society, the Michigan Association of Roentgenologists and the Detroit Roentgen Ray Society, the Detroit Ophthalmological Society, the Michigan Association of Obstetricians and Gynecologists, and the Michigan Pediatric Society—are all giving generously of their time to help make the procedures under Michigan Medical Service in accord with the best medical practices.

### Surgical Benefit Plan

The Surgical Benefit Plan has been more widely accepted by the public than the Medical Service Plan, primarily because of the lower subscription cost. Only a small percentage of the persons eligible for enrollment are willing to

**MICHIGAN MEDICAL SERVICE REGISTRATION**

**HONOR ROLL**

**(As of February 10, 1941)**

100 Per Cent

Barry
Mason

90 to 99 Per Cent

Calhoun
Manistee
Menominee
Monroe
Newaygo
Tuscola

80 to 89 Per Cent

Allegan
Bay—Arenac—Iosco—Gladwin
Chippewa—Mackinac
Clinton
Delta—Schoolcraft
Dickinson—Iron
Gogebic
Gratiot—Isabella—Clare
Hillsdale
Ingham
Kent
Lenawee
Mecosta—Osceola
Midland
Oceana
O.M.C.O.R.O.
Ontonagon
Ottawa
Saginaw
St. Joseph

75 to 79 Per Cent

Branch
Eaton
Houghton—Baraga—Keweenaw
Lapeer
Muskegon
Northern Michigan
Wexford—Kalkaska—Missaukee

budget enough to participate in the more complete Medical Service Plan. However, once the subscribers are enrolled in the Surgical Benefit Plan, they later desire to pay an additional amount to enroll in the more complete Medical Service Plan. This tendency has become evident in several groups which were originally enrolled in the Surgical Benefit Plan and later transferred to the Medical Service Plan.

### Service to Ford Group Ended February 28

The Ford Motor Company, whose employes enrolled in the Surgical Benefit Plan one year ago, has decided to arrange for the transfer of its entire group to an insurance company plan, beginning March 1, 1941. On and after March 1, Ford employes who sign for the insurance company plan will be entitled to the usual insurance company schedule of payments for surgical operations. Michigan Medical Service will pay for services rendered Ford employes up to February 28, 1941.

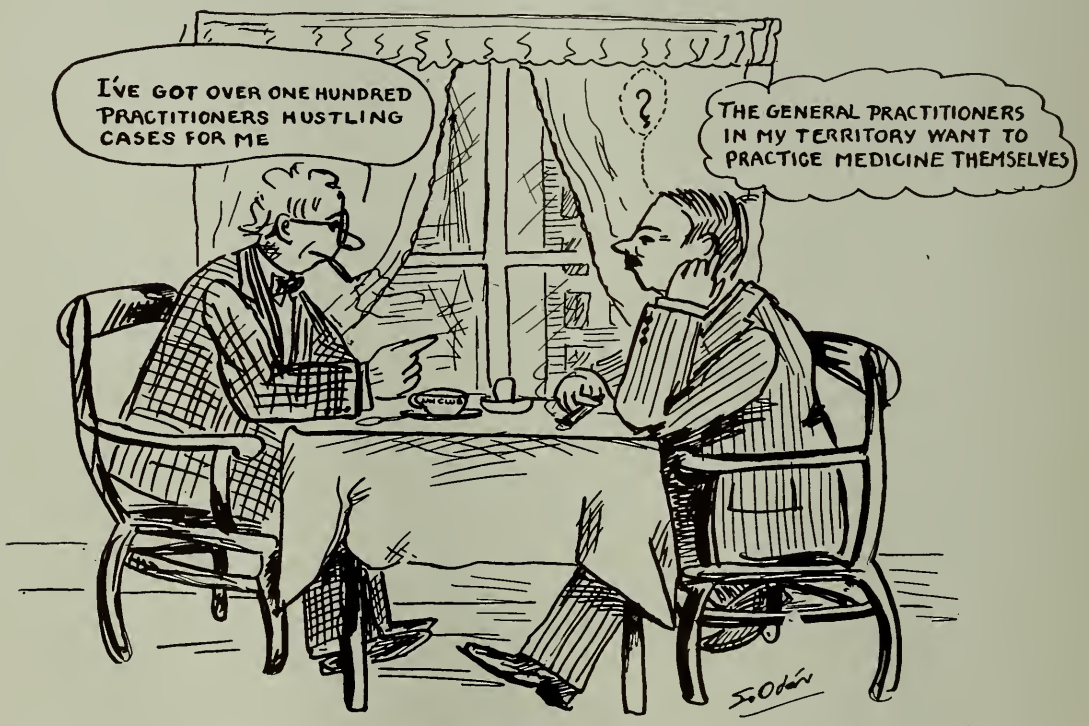
The enrollment of other groups in the Surgical Benefit Plan is now in excess of 44,000 persons, representing 223 groups of subscribers, and additional groups are being enrolled daily. Hence, the termination of the Ford group will not seriously affect the continuous growth of Michigan Medical Service. It will mean that doctors of medicine may no longer have payment made directly to them for surgical operations rendered for these several thousand employes. *Under the insurance program, the employes will receive a specified number of dollars and it will be necessary for the doctor to collect his fee from the Ford employe direct.*

### Weekly Payments

With additional coöperation on the part of doctors of medicine, it will be possible for Michigan Medical Service to make payments to doctors rendering services for subscribers within a week after services are completed.

To do so, it will be necessary for the doctor to send his Initial Service Report *immediately* on the day that his services are first requested by the subscriber. Upon receipt of this Report, the subscriber's eligibility for services can be verified and necessary records established.

In order that the payment can be made promptly, it is necessary for the doctor to send his Monthly Service Report immediately when services are completed. *Please fill in your Report completely so that your payments will not be delayed.*




**Fifth Columnist?**

# SULFATHIAZOLE *Winthrop*

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# YOU AND YOUR BUSINESS

## MICHIGAN HOSPITALS AND MEDICAL PAYMENTS PLAN

■ The agreement re accident cases entered into by the insurance associations and independent companies, the State Medical Society and the Hospital Association was explained in detail in the February MSMS Journal (pages 123 to 125, inclusive).

The three forms to be used in connection with this agreement were published in The Journal.

The Secretary will act as a clearing house from which Forms 1, 2 and 3 may be obtained. The cost of the forms in pads of 100 will be fifty cents; in pads of 50 the cost will be twenty-five cents. All three forms are not included in one pad, so if more than one form is required, be sure to specify, such as, "a pad of 100 of Form No. 1, a pad of 50 each of Forms No. 2 and 3," et cetera. Cash or postage stamps must accompany all orders for blanks. Individual blanks or copies of Forms 1, 2 and 3, singly or in combination, may be obtained for 5 cents.

Address orders for forms, inquiries, suggestions or complaints for the attention of the Conference Committee to L. Fernald Foster, M.D., 2020 Olds Tower, Lansing.

## THE LAW ON OBSTETRICAL ENGAGEMENTS

■ When a doctor accepts a patient for confinement, it makes no difference whatever whether this is a relief patient or a pay patient. The law requires the same degree of care and skill in discharging the contract. If a doctor is not available when labor begins, then the law imposes upon him the duty of providing a substitute. The fact that the doctor was called to attend another patient does not excuse him from the responsibility, if harm results, from his neglect of being present during the delivery. This is quite an important matter, and members of the profession should fully understand that when a physician agrees without qualification to attend a patient during confinement, he can only discharge that contract by being present or providing a substitute. The courts have many times held that it is no excuse that the doctor was engaged with another patient or was making another delivery at the same time. He accepted the patient and must carry out his contract or provide competent assistance.

If before the patient enters labor, the doctor desires to withdraw from the case, then he may do so by giving the patient reasonable notice so that another doctor may be secured. This notice, of course, should be in writing or given orally in the presence of a witness who will be available to support the doctor should trouble develop at a later date. A doctor is not released from his duty under these circumstances by the mere fact that he is busy with another case. He has accepted employment and has consented to bind himself, and the law construes that he is bound by this contract and must discharge it in person or by a competent substitute or by giving timely notice to the patient so that she has sufficient time to secure another doctor.

## AN AMBIGUOUS LAW

■ Michigan's osteopathic practice act (Act 162 of the Public Acts of 1903) is so ambiguous that osteopaths themselves are not of one mind as to how far they may practice. Section 6760 states that the certificate provided in the practice act *"shall entitle the holder thereof to practice osteopathy in the state of Michigan in all of its branches as taught and practiced by the recognized colleges or schools of osteopathy."* So for example, if a didactic course of neurosurgery were taught for a week or less in an osteopathic school, a licensed osteopath in Michigan thereby has the right to practice brain surgery on any and all patients!

A similar ambiguity in the Georgia law has just been clarified by its Supreme Court which held in the case of Mabry v. State Board of Examiners in Optometry, 10 S.E. (2d) 740 (Ga., 1940): "While the legislature has recognized osteopathy as one of the healing arts and has set up a plan for licensing osteopaths, it did not intend that osteopaths should be permitted to embrace the field of optometry and other professions by adopting the methods of healing

practiced by such professions, on the theory that such methods are taught and practiced in reputable colleges of osteopathy. To construe the osteopathic practice act as urged by the appellants would mean that by merely teaching and practicing every known science of healing in osteopathic colleges an osteopath would be permitted to practice without restraint all such methods of healing. This would nullify every regulatory statute of the state having for its purpose the licensing and regulation of the practice of the various professions of healing authorized by law."

The Georgia Supreme Court decided, therefore, that osteopaths could practice *only osteopathy* as taught and practiced in osteopathic schools.

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## LIABILITY OF PHYSICIANS IN MILITARY SERVICE

■ Recently the following question was asked: What is the liability of a physician for rent on a lease for the time he is serving his country with the armed forces?

The physicians' liability is altered to a very small extent by the fact that he is serving his country in its armed forces. The Soldiers' and Sailors' Relief Act of 1940 (Public No. 861—76th Congress) only suspends the enforcement of civil liabilities in certain cases where the agreed rent does not exceed $80.00 per month. In these cases, no eviction or distress shall be made except on leave of court, but if in the opinion of the court the ability of the tenant to pay the agreed rent is not materially affected by reason of such military service no stay is to be granted. It may be added that the rental allowance of a First Lieutenant (the lowest rank for a physician) is $60.00 per month. It thus appears doubtful if any stay would be granted by a court for such a case. However, if a stay is granted, the physician is not completely relieved of the obligation; it is only postponed.

---

## PLACEMENT BUREAU

■ Opportunities for practice are said to exist in several localities of Michigan.

For detailed information write the Placement Bureau, MSMS, 2020 Olds Tower, Lansing, Michigan.

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# Woman's Auxiliary

### Bay County

The Bay County Woman's Auxiliary held its main meeting of the year on January 8 at the Mercy Hospital and Nurses Home. Dinner was served to a group of members and their husbands in compliment to Dr. Frank H. Power, of Ann Arbor, who was our lecturer for the evening.

Dr. Power gave an illustrated lecture on "Cancer," which was very interesting and informative. The public was invited to attend the lecture and a capacity crowd attended.

Mrs. J. N. Asline,
*Corresponding Secretary.*

### Genesee County

The regular monthly meeting of the Woman's Auxiliary of the Genesee County Medical Society was held on January 22 at 12:30 p. m. at the Y. W. C. A. with about 65 members present. Mrs. George Curry was chairman in charge with an assisting committee composed of Mrs. George Conover, Mrs. F. E. Reeder, Mrs. Arthur Kretchmar. The regular meeting was preceded by the board meeting at 11:45 a. m.

A change of date for both the February and March meetings was announced by the board. At the February meeting the program was in charge of Mrs. Clifford Colwell, who presented an Interior Decorator. The regular March meeting will be held on the third Tuesday, March 18, at Hurley Hospital.

Bernice R. Wright, *Chairman.*

### Grand Traverse-Leelanau-Benzie

The Woman's Medical Auxiliary, having been organized a little over a year, is still in the embryonic stage, with a membership of twenty-one. We have held our meetings on the same evenings as the Medical Society, at the Central Michigan Children's Clinic, Traverse City.

Following our business sessions we have made supplies for the James Decker Munson Hospital, Traverse City. On two occasions we have had physicians speak to us, the Public Health Physician being one, who spoke on the Public Health Program in the counties. The other spoke on pending bills in the Legislature in regard to medicine.

Last October, after the infantile paralysis epidemic occurred in Northern Michigan, we decided to launch a drive for funds for an iron lung to be donated to Munson Hospital. The drive was very successful, the citizens and organizations of the community responding in a most generous manner, with the result that we have purchased the iron lung, costing $1,500; also an infant respirator for the hospital, at a cost of $375, and we still have funds to apply on a new project.

We have enjoyed our work and hope to accomplish greater things in the future.

Marjorie W. Thompson,
*Corresponding Secretary.*

### Jackson County

The regular monthly meeting of the Jackson County Medical Auxiliary was held January 21 at the Hayes Hotel. Dinner was served to eighteen members.

The business meeting was opened by the president, Mrs. G. R. Bullen. Mrs. Balconi read the minutes of the October and November meetings and Mrs. Andrew Payne gave the treasurer's report.

After a very short meeting the evening was spent playing bridge, prizes going to Mrs. George Baker, Mrs. William Meade, Mrs. P. A. Scheurer and Mrs. Harold Dold. The committee consisted of Mrs. W. B. Anderson, Mrs. H. W. Porter, Mrs. W. L. Faust, Mrs. W. L. Finton, Mrs. F. J. Gibson, Mrs. R. J. Hanna, Mrs. W. H. Lake, Mrs. E. G. Wilson, Mrs. L. F. Thalner and Mrs. William Meade.

### Saginaw County

The Saginaw County Auxiliary was indeed complimented on Tuesday evening, January 21, when Dr. and Mrs. Paul R. Urmston of Bay City visited the group. The meeting was held at the home of Mrs. Louis D. Gomon, Edgewood Road, Saginaw.

Dr. Urmston, president of the Michigan State Medical Society, spoke on the "Political and Economic Side of the Practice of Medicine." He also reviewed the program of the NYA, which has been approved by the State Society.

Yarn for Red Cross knitting was distributed to members and during a short business meeting it was decided to assist the Social Agencies in supplying Cod Liver Oil to indigent children.

Mrs. Fred Pietz was chairman of the social hour which followed. Dainty refreshments were served with the following committee assisting: Mrs. E. P. Richter, Mrs. F. E. Luger, Mrs. E. G. Tiedke, Mrs. J. H. Curts, Mrs. C. W. Cory, Mrs. H. A. Phillips and Mrs. R. I. Lurie.

### St. Clair County

At a dinner meeting of the Auxiliary to the St. Clair Medical Society held January 14 at the Chateau, members voted to meet Fridays from 1 to 4:30 p. m. at the Red Cross Headquarters to make surgical dressings.

Mrs. D. H. Burley, Almont, described the work of the Auxiliary of the Lapeer County Medical Society. Mrs. B. C. Clyne, Yale, and Mrs. W. H. Boughner, Algonac, were members from out of town at the meeting. A round table discussion followed Mrs. Burley's talk. Mrs. W. A. Schaeffer, vice president, conducted the business meeting.

Ernestine F. Treadgold,
*Press Chairman.*

### Wayne County

On January 10, 1941, the Wayne County Woman's Auxiliary met at the Woman's City Club for luncheon preceding the regular meeting.

Dr. Bruce H. Douglas was the guest speaker who addressed the group on the "Prevention and Control of Tuberculosis in Detroit." Dr. Douglas' description of modern methods used in the control of this disease was both interesting and instructive. The statistics which he gave, showing the steady decline in the number of cases in the Detroit area, were very encouraging, but showed the tremendous amount of work yet to be done in stamping out this scourge.

At the close of the program there was a short business meeting, at which the president, Mrs. Frederick G. Buesser, presided.

Margaret J. Wallace,
*Press Chairman.*

# WEHENKEL SANATORIUM

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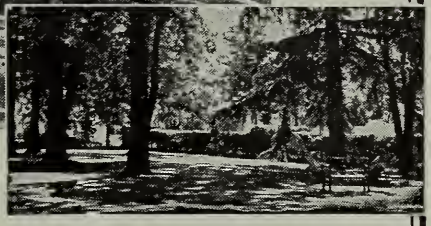
CONVALESCENT HOME FOR TUBERCULOSIS



A MODERN, comfortable sanatorium adequately equipped for all types of medical and surgical treatment of tuberculosis. Sanatorium easily reached by way of Michigan Highway Number 53 to Corner of Gates St., Romeo, Michigan.

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## DISEASES OF THE RECTUM

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GRAND RAPIDS, MICHIGAN

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Sanitarium Hotel Accommodations

# MICHIGAN'S DEPARTMENT OF HEALTH

HENRY A. MOYER, M.D., Commissioner, Lansing, Michigan

## NEW BUREAU OF TUBERCULOSIS

Dr. George A. Sherman of Pontiac has been appointed director of the Bureau of Tuberculosis, newly created bureau in the Michigan Department of Health. Previously, tuberculosis control has been one of the activities of the Bureau of Epidemiology.

In order to take over the tuberculosis work for the State Department of Health, Dr. Sherman resigned as director of the Oakland County Sanatorium, 250-bed institution which is the largest of the thirty-three county tuberculosis sanatoriums in the state.

"Organization of the new bureau is a step in a concentrated attack on tuberculosis which the State Department of Health will feature from now on," Commissioner Moyer said. "By intensifying finding of cases by x-ray and other methods, and by coöperating with other organizations having the same aim, we shall be able to bring more persons under early treatment. That will cut the cost to the state and to counties, and will mean more cures.

"I have received from physicians and others hearty approval of the appointment of Dr Sherman. We are fortunate in getting him."

Dr. Sherman is forty-four years old, a diplomate of the American Board of Internal Medicine, and is a recognized tuberculosis specialist. He is a fellow of the American College of Physicians, a member of the Michigan Association of Roentgenologists, and a member of the Michigan State Medical Society. In 1939-40 he was a member of the Council of the Michigan State Medical Society. In 1939 he served as president of the Oakland County Medical Society.

Dr. Sherman is president of the Michigan Tuberculosis Association, and a past president of the Michigan Trudeau Society and the Michigan Sanatorium Association.

After graduation from McGill University, Faculty of Medicine, Dr. Sherman was instructor in internal medicine at the University Hospital, University of Michigan. He was medical director of the tuberculosis division of the hospital from 1926 to 1928. He entered private practice at Pontiac in 1929 and became medical director of the Oakland County Sanatorium in 1933.

## LOBAR PNEUMONIA LESS

Lobar pneumonia cases reported so far this season have run far below ten-year average figures. The comparisons follow:

| Reported Cases of Lobar Pneumonia | 1940-41 Season | 1939-40 Season | Ten-year Average |
|---|---|---|---|
| July | 134 | 92 | 149 |
| August | 84 | 102 | 127 |
| September | 100 | 109 | 153 |
| October | 139 | 147 | 248 |
| November | 203 | 238 | 311 |
| December | 319 | 527 | 517 |
| January | 381* | 410 | 619 |

*Incomplete.

October, November and December totals were the lowest reported for those months in the previous ten years, and January cases may also be a record low.

## HEALTH UNITS APPRAISED

Appraisals of all county and district health departments on American Public Health Association standards are now being made. For a time, Dr. Carl Buck, field medical director of the A.P.H.A. and Dr. B. G. Horning, his assistant, will aid in the appraisals. This will be the first time that all county and district health departments in the state will have appraisals in the same year. Dr. E. V. Thiehoff, assistant director of the Bureau of Local Health Services, will make most of the appraisals, with the aid of Dr. Buck and Dr. Horning. Br. Bernard W. Carey and Miss Miriam Cummings of the Children's Fund will appraise the Upper Peninsula departments and the W. K. Kellogg Foundation will make appraisals in the seven counties where the Foundation works. The ratings will be finished by May 1.

## PERSONNEL CHANGES

Dr. L. E. Kerr was named director of the Iron County Health Department by the board of supervisors January 11, 1941.


**Physicians' Service Laboratory**

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# ✶ COUNTY AND PERSONAL ACTIVITIES ✶

**100 Per Cent Club for 1941**

Barry
Ingham
Manistee
Muskegon
Oceana
Ontonagon
Tuscola

The above county medical societies have certified the 1941 dues of 100 per cent of their 1940 membership. A number of other societies have certified all but a few of their 1940 members. As soon as these few have paid their 1941 dues the list of 100 per cent county socities will be much larger.

*For commissioned officers* in the medical department of the regular navy the next examination will be held at all large naval hospitals on May 12, 1941, according to the Surgeon General of the United States Navy.

* * *

*Enabling legislation* to permit the establishment in Ohio of an organization similar to Michigan Medical Service has been introduced in the Ohio Legislature. It is sponsored by the Ohio State Medical Association.

*"Plasma Vitamine C and Serum Protein Levels in Wound Disruption"* is the title of an article appearing in the *Journal of the American Medical Association,* issue of February 22, 1941, by John B. Hartzell, M.D., James Winfield, M.D., and J. Logan Irvin, Ph.D., Detroit.

* * *

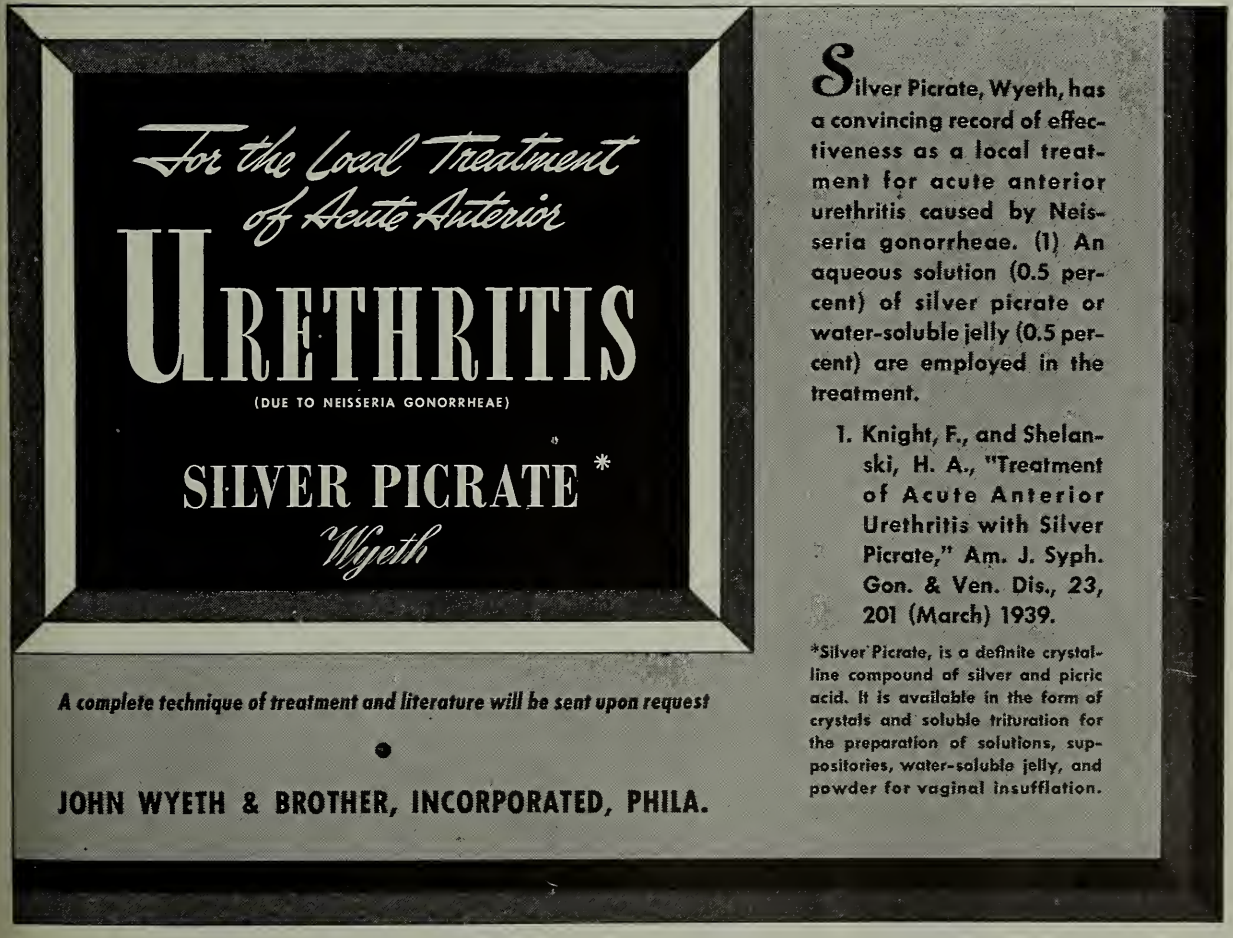
*Wm. J. Burns,* Executive Secretary of the MSMS, addressed the Danby Grange near Portland on Thursday, February 13. Mr. Burns also spoke to the E. O. T. C. Club of Leslie on Tuesday, February 18. His subject at each meeting was "State-Managed Medicine vs. Michigan Medical Service."

* * *

*J. Earl McIntyre, M.D.,* Lansing, Secretary of the State Board of Registration in Medicine, was installed on February 17, 1941, in Chicago, as President of the Federation of State Medical Boards of the United States at the annual meeting of the Federation. Congratulations!

* * *

*Physicians wanted* by United States Civil Service. Applications are being accepted by the U. S. Civil Service Commission, Washington, D. C., for Senior Medical Officer at $4,600; Medical Officer at $3,800; and Associate Medical Officer at $3,200 per year for service in the following agencies: Public Health Service, Food and Drug Administration, Veterans' Administration, Civil Aeronautics Administration and Indian Service.

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Nervous and Mental Diseases
and Associated Conditions

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*The Treatment of Mental Diseases*
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**SAWYER SANATORIUM**

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**Marion, Ohio**

*Lt. Colonel Harold A. Furlong, M.D.,* formerly of Pontiac, head of the Medical Board, State Headquarters of Selective Service, was appointed Administrator, Michigan Council of Defense, by Governor Murray D. Van Wagoner on January 24. Congratulations, Doctor Furlong!

* * *

*At the recent National Conference on Medical Service* in Chicago on February 16 the following from Michigan were present: P. R. Urmston, M.D., Bay City; Henry R. Carstens, M.D., and A. S. Brunk, M.D., Detroit; L. Fernald Foster, M.D., Bay City; Harold A. Miller, M.D., Lansing; T. S. Conover, M.D., Flint; C. E. Black, M.D., and J. Earl McIntyre, M.D., Lansing; E. W. Schnoor, M.D., Grand Rapids; S. W. Donaldson, M.D., Ann Arbor; L. J. Hirschman, M.D., Detroit; George Le Fevre, M.D., Muskegon; Wm. J. Burns, Lansing; J. D. Laux and James A. Bechtel, Detroit.

* * *

*Doctor, remember your particular* friends, the exhibitors, at your annual convention, when you have need of equipment, appliances, medical supplies and service. Here are ten more of the firms which helped make the 1940 convention such a success:

Medical Protective Company, Wheaton, Illinois
Medical Case History Bureau, New York.
Medical Arts Surgical Supply Company, Grand Rapids.
Mead Johnson & Company, Evansville, Indiana.
M. & R. Dietetic Laboratories, Inc., Columbus, Ohio.
J. B. Lippincott Company, Philadelphia.
Eli Lilly & Company, Indianapolis.
Liebel-Flarsheim, Cincinnati.
Libby, McNeill & Libby, Chicago.
Lederle Laboratories, Inc., New York.

* * *

*The Northern Tri-State Medical Association* will hold its 1941 Meeting at Tiffin, Ohio, on April 8. According to E. B. Gillette, M.D., of Toledo, Secretary of the Association, the following outstanding physicians have been secured for the program which will begin at 9:00 a. m. in the Tiffin Theater opposite the Shawhan Hotel: Frederick P. Yonkman, M.D., Detroit; Carl D. Camp, M.D., Ann Arbor; A. D. Ruedemann, M.D., Cleveland; E. Perry McCullagh, M.D., Cleveland; Roy W. Scott, M.D., Cleveland; George M. Curtis, M.D., Columbus, W. D. Gatch, M.D., Indianapolis; Wm. N. Wishard, M.D., Indianapolis, and Elliott P. Joslin, M.D., Boston. Write E. B. Gillette, M.D., 320 Michigan Street, Toledo, Ohio, for complete program.

* * *

*Clinic Day at St. Mary's Hospital, Detroit,* is scheduled for March 20. The program which begins at 9:00 a. m. includes the following speakers: Roy D. McClure, M.D., Detroit; Charles G. Johnson, M.D., Detroit; Henry K. Ransom, M.D., Ann Arbor; Virgil S. Counsellor, M.D., Rochester, Minnesota; A. E. Catherwood, M.D., Detroit; Harold Henderson, M.D., Detroit; Frederick A. Coller, M.D., Ann Arbor; Lester R. Dragstedt, M.D., Chicago; C. Fremont Vale, M.D., Detroit; Warren B. Cooksey, M.D., Detroit; John B. Hartzell, M.D., Detroit; Richard M. Johnson, M.D., Detroit; Edward Ducey, M.D., Detroit; Robert L. Schaefer, M.D., Detroit; Elwood A. Sharp, M.D., Detroit; J. P. Pratt, M.D., Detroit; George Rieckhoff, M.D., Detroit; Arthur B. McGraw, M.D., Detroit; Professor James Reyniers, South Bend, Indiana; Henry N. Harkins, M.D., Detroit; D. K. Kitchen, M.D., Detroit; Walter J. Wilson, Sr., M.D., Detroit; Rev. Hugh O'Donnell, President, Notre Dame University, South Bend; Henry A. Luce, M.D., Detroit; Mr. Frank Cody, Detroit; Allan McDonald, M.D., Detroit; Edgar Norris, M.D., Detroit, and Rev. Alphonse M. Schwitalla, S.J., St. Louis, Missouri.

*The MSMS Radio Committee* advises that the following Health Talks were broadcast over radio station CKLW:

Saturday, February, 1, 1941—"Simple Facts About How We Hear," by Wadsworth Warren, M.D., Detroit.

Saturday, February 8, 1941—"Scarlet Fever," by Franklin H. Top, M.D., Detroit.

Saturday, February 15, 1941—"Artificial Fever Therapy," by Donald Francis, M.D., Detroit.

Saturday, February 22, 1941—"The Importance of Prenatal Care," by Harold Mack, M.D., Detroit.

Saturday, March 1, 1941—"The Value of Anesthesia in Surgery and Medicine," by Norman Bittrick, M.D., Detroit.

* * *

*Warning!* Check forger at large in Michigan described as 55 to 58 years of age, 5 feet 5 inches to 5 feet 8 inches tall, about 185 pounds, smooth talker and fairly well dressed, poses as a state employe and passes small checks in amounts from $9.50 to $12.00, which are supposedly for expense accounts on the State Highway, Auditor General and State Conservation Departments. He is also known to have passed Township and County checks. He generally purchases a small item and obtains the balance of the check in cash. He has used the following names: Chester Parker, Sr., Peter T. Bogan, George W. Clark, Charles H. Carlisle and James H. Carter. The name of the city, the bank, the title of the person signing the check, the name of the department, etc., is inserted with a typewriter, and he uses a check protector. If you have any information on this man, please notify your local police or the Michigan State Police, East Lansing.

* * *

*Henry F. Vaughan, D.P.H.,* Detroit, has been named Professor of Public Health to head the newly created School of Public Health at the University of Michigan. Doctor Vaughan has been special lecturer in public health administration at the University since 1922. Doctor Vaughan will coöperate in planning a new building and organization of the new school, which it is hoped will be ready for operation this fall. The W. K. Kellogg Foundation and the Rockefeller Foundation are coöperating in the establishment of the school, each contributing $500,000. Not more than one-half of the total of $1,000,000 thus contributed may be used for site, building and equipment, the remainder to be spread out over a ten-year period for expenses of operation. Doctor Vaughan received his degree in public health from the University of Michigan in 1916. He has served as associate professor of public health at Wayne University from 1915 to 1937 and since 1937 has been professor of preventive medicine and public health at Wayne. He has been commissioner of health in Detroit since 1918.

* * *

## COUNTY MEDICAL SOCIETY MEETINGS

*Bay*—Wednesday, January 29—Bay City—Speaker: H. A. Pearse, M.D., Detroit—Subject: "Clinical Gynecology."—Wednesday, February 12—Bay City—Program: "Studies in Human Fertility."—Wednesday, February 26—Bay City—Speaker: A. E. Schiller, M.D., Detroit—Subject: "The Problem of Dermatitis in Practice."

*Berrien*—Wednesday, February 12—Niles—Speaker: Jesse T. Harper, M.D., Detroit—Subject: "Present-Day Thoughts on the Treatment of Hemorrhoids."

*Calhoun*—Tuesday, February 4—Battle Creek—Speaker: Hobart A. Reimann, M.D., Philadelphia—Subject: "Treatment of Pneumonia."

*Dickinson-Iron*—Thursday, February 6—Iron Mountain—Subject: "Public Health as it relates to the Community and Private Practice" in charge of Drs. Kerr and Place.


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*Hillsdale*—Thursday, February 20—Hillsdale—Speaker: Charles F. McKhann, M.D., Ann Arbor—Subject: "The Chronically Undernourished Child" and clinical conference.

*Ingham*—Tuesday, February 18—Lansing—Speaker: Arthur C. Curtis, M.D., Ann Arbor—Subject: "Chemotherapy in Pneumonia."

*Ionia-Montcalm*—Tuesday, February 11—Stanton—Speaker: C. H. Snyder, M.D., Grand Rapids—Subject: "Orthopedic Conditions as seen by the General Practitioner."

*Jackson*—Tuesday, February 18—Jackson—Speaker: Wm. J. Cassidy, M.D., Detroit, Color Movies of Abdominal Operations.

*Kalamazoo*—Tuesday, February 18—Kalamazoo—Speaker: Richard Freyberg, M.D., Ann Arbor—Subject: "Newer Treatments for Arthritis."

*Kent*—Tuesday, February 11—Grand Rapids—Speaker: Pearl Kendrick, M.D.

*Muskegon*—Friday, February 21—Muskegon—Speaker: Attorney John F. Frederick—Subject: "Intangible Tax"—Also color motion picture on "Regional Anesthesia."

*Oakland*—Wednesday, February 5—Routunda Inn—Speaker: J. C. Pratt, M.D., Detroit—Subject: "Recent Advances in Obstetrics and Gynecology."

*Ottawa*—Tuesday, February 11—Grand Haven—Speaker: Harold Dykhuizen, M.D., Muskegon—Subject: "Rôle of Urology to Essential Hypertension."

*St. Clair*—Tuesday, January 28—Port Huron—Program: Motion picture "The Treatment of Eclampsia." Tuesday—February 11—Port Huron—Speaker: George Leckie, M.D., Detroit—Subject: "Tuberculosis of the Genito-Urinary Tract." Tuesday—February 25—Port Huron—Speaker: H. J. Kullman, M.D., Detroit—Subject: "Indications for and Value of Gastroscopy."

*St. Joseph*—Thursday, February 13—Sturgis—Speaker: Captain Herbert D. Edger of Fort Custer—Subject: "Military Medicine."

*Shiawassee*—Thursday, February 20—Owosso—Speaker: R. H. Freyberg, M.D., Ann Arbor—Subject: "Treatment of Chronic Arthritis."

*Washtenaw*—Tuesday, February 11—Ann Arbor—Speaker: Udo J. Wile, M.D., Ann Arbor—Subject: "Pitfalls in the Diagnosis and Treatment of Syphilis."

*Wayne County*—Monday, March 3—Detroit—General Meeting—Speaker: Stanley P. Reimann, M.D., Philadelphia—Subject: "Normal Intracellular Constituents in Relation to Growth." Monday, March 10—Medical Meeting—Speaker: Virgil E. Simpson, M.D., Louisville—Subject: "The Physician, the Pharmacist, and the Pharmacopœia." Monday, March 17—General Practice Meeting—Speaker: R. W. McNealy, M.D., Chicago—Subject: "The Mechanics of Inguinal Hernia." Monday, March 24—Surgical Meeting—Speaker: Geza de Takats, M.D., Chicago—Subject: "Pulmonary Embolism." Monday, April 7—General Meeting—Speaker: John T. Murphy, M.D., Toledo—Subject: "Cancer of the Skin."—Annual Hickey Memorial Lecture.

*West Side (Wayne County)*—Wednesday, February 19—Detroit—Speakers: Harry C. Saltzstein, M.D., on "Terminal Pictures in Malignancy in Contract with other Terminal Pictures" and Frank A. Lamberson, M.D., on "Treatment with Illustrations of Abscesses of the Face, Neck and Chest," also motion pictures on "Studies in Human Fertility."

## COUNCIL AND COMMITTEE MEETINGS

1. *Tuesday, February 4, 1941*—11:00 a. m.—Special meeting of representatives of seven organizations re afflicted-crippled child law amendments—Hotel Olds, Lansing.
2. *Thursday, February 6, 1941*—3:00 p. m.—Executive Committee of The Council—Hotel Olds, Lansing.
3. *Thursday, February 13, 1941*—3:00 p. m.—Legislative Committee—Hotel Olds, Lansing.
4. *Monday, February 17, 1941*—6:30 p. m.—Cancer Committee—Woman's League, Ann Arbor.
5. *Tuesday, February 18, 1941*—11:00 a. m.—Special meeting of representatives of seven organizations re afflicted-crippled child law amendments—Hotel Olds, Lansing.

* * *

## McGREGOR CONVALESCENT HOME

*The new Convalescent Home* of the McGregor Health Foundation has been opened in Detroit. The McGregor Health Foundation, a charitable incorporation of the State of Michigan, was founded seven years ago by the late Tracy W. McGregor, a well-known Detroit philanthropist.

Since its inception the Foundation has been working in the field of convalescent and rest care as an aid to a more full and rapid recovery from illness. Numerous studies have been made of this problem by the McGregor Health Foundation and many deserving patients have been aided by them. A few months ago a thirty-bed convalescent home was opened by this Foundation in Detroit, where such useful adjuncts to recovery from illness as a pleasing and restful environment, physiotherapy, diversional therapy, dietotherapy, and expert nursing service, may be provided at a minimal cost.

The Foundation is managed by a Board of Trustees composed of physicians, laymen and professional workers. Michigan is indeed fortunate in having the McGregor Health Foundation working in this most important field of medical care.

* * *

*The February meeting* of the Michigan Pathological Society was held as a joint meeting with the Detroit X-ray and Radium Society at Henry Ford Hospital on Saturday, February 8. The Detroit X-ray and Radium Society had invited members of the Michigan Radiological Society to be present as guests. Sixty-four were in attendance.

The afternoon session consisted of demonstrations on the subject, "Tumors and Cysts of Bone," and at the evening session, the cases previously demonstrated were presented and discussed. Cases were presented by Drs. Kaump, Frank Hartman, Lester Hoyt, M. O. Alexander, Howard Doub, John Murphy, and S. M. Gould.

The next meeting will be held on April 19, in Flint, Michigan, at the Hurley Hospital, subject to be selected.

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# THE DOCTOR'S LIBRARY

*Acknowledgement of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

DISEASES OF THE DIGESTIVE SYSTEM. Edited by Sidney A. Portis, B.S., M.D., F.A.C.P., Associate Clinical Professor of Medicine, Rush Medical College of the University of Chicago; Attending Physician, Michael Reese Hospital; Consulting Physician, Cook County Hospital, Chicago. Illustrated with 176 engravings. Philadelphia: Lea & Febiger, 1941. Price: $10.00.

The reputation of Sidney Portis as a gastro-enterologist guarantees the reliability of this textbook. As he says, "The modern gastro-enterologist must be thoroughly trained in the laboratory and have a broad general clinical experience in all branches of internal medicine." He has had the assistance of fifty-one contributors, all of whom have established themselves in their various fields. It is not a very readable book but provides in textbook fashion a complete story of the present-day knowledge of gastro-intestinal diseases. Treatment is especially emphasized, thus enhancing the value of the volume to the practitioner.

---

IT IS YOUR LIFE. Keep Healthy—Stay Young—Live Long. By Max M. Rosenberg, M.D., Member, American Medical Association and New York County Medical Society. Formerly in charge of Clinical Laboratory O. P. Dep't, Beth Israel Hospital; Clinical Asst. Internal Medicine, Beth Israel Hospital; Clinical Asst. Pediatrics, Gouveneur Hospital. New York: The Scholastic Book Press, 1940. Price $2.50.

This is a very sensibly written book of medical advice to the layman and avoids more than usual the common fault of lay medical books in mass prescribing. The language is clear and for the most part reliable. In the hands of the average patient it is safe and should be of educational value.

---

DIET MANUAL. Dietetics Department, Harper Hospital, Detroit, Michigan. Copyright 1940.

When a hospital of the standing of Harper Hospital in Detroit issues a volume of diet lists and instructions it can be unequivocally accepted as authentic and practical. A study of this manual bears out this expectation. All practical consideration seems to be well covered.

---

A TEXTBOOK OF CLINICAL PATHOLOGY. Edited by Roy R. Kracke, Emory University, Georgia, and Francis P. Parker, Emory University, Georgia. Second Edition. A William Wood Book. Baltimore: The Williams & Wilkins Company, 1940. Price: $6.00.

This second edition has been completely revised and reset. There are many changes due to the addition of new material, particularly new procedures which have been introduced in the last two years. A new chapter on determinations of vitamins and hormones, a rewritten chapter on serological procedures in the diagnosis of syphilis, examination of the bone marrow, and many other additions and revisions of laboratory material are included. It is well arranged, accurately written and well illustrated with both ordinary and color plates.

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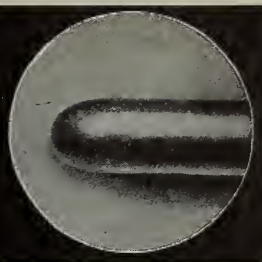

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* Espe & Dye — "Effect of Curd Tension on the Digestibility of milk" — Amer. Journal Diseases of Children — 1932, Vol. 43, p. 62.

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# SELECTIVE SERVICE MEDICAL DEPARTMENT

Announcement has been made of the formation of three additional Medical Advisory Boards in Detroit. With the five Medical Advisory Boards already formed, eight boards will be available to serve the Wayne County area. The new boards with their hospital headquarters and chairman are as follows:

Board No. 20—Grace Hospital—Milton A. Darling, M.D.

Board No. 21—Woman's Hospital—Roy C. Kingswood, M.D.

Board No. 22—Charles Godwin Jennings Hospital—Raymond B. Baer, M.D.

Of Michigan's 679,727 registrants, 287,685 live in Wayne County. The burden of work on five Medical Advisory Boards proved considerable. The new boards with a reshuffling of the jurisdiction of the old boards ought to materially relieve the situation. Members of the Medical Advisory Boards are not paid for their professional services. Throughout the state these Medical Advisory Boards have been doing an excellent job advising the Examining Physicians on the doubtful cases among the selectees.

* * *

The physicians in Michigan have already performed nearly 40,000 physical examinations. As the quotas of men increase, the load becomes correspondingly greater. In many localities the physicians have formed examining groups. This has been a very satisfactory procedure as it considerably lightens the load on individual physicians and prevents the congestion of small offices. The registant is assured of a more careful consideration of his physical condition by a group of examiners. Group examinations are encouraged by the Selective Service wherever local conditions allow.

Recently a decision has come from the National Headquarters of Selective Service stating that the same physician or group of physicians may be appointed examining physician or physicians for more than one Local Board. A pool of physicians may be appointed as examining physicians for all the Local Boards within a community.

* * *

In every program there is apt to be a sour note. There have been several instances lately where the press, both in news items and editorially, has criticized physicians for their part in the rejection of men at the Induction Centers. In most cases such stories were published without any clear knowledge of the facts or what was being done to correct the situation. In a few instances doctors working for Local Boards have been mentioned by name. This, of course, rightfully created a terrific reaction among the doctors. The policy of State Headquarters has been never to release to the press any information about physicians in connection with any physical examinations. Local Boards have also been advised not to release such information.

It is also the opinion of State Headquarters that the reason for the rejection of any registrant should not be disclosed to the press. This is confidential information and the Local Board should so regard it. Unfortunately, no one can stop curious reporters from putting two and two together and producing an article that hurts. The State Headquarters has investigated several of these press notices and in each case found the press wholly unaware of the backfire on the doctor. Most of the newspapers have sought to justify the wrong done the selectees who have given up their jobs, sold their automobiles and received a gala send-off only to be turned back a day or so later stranded and humiliated. The wrong to the medical profession has been unintentional.

* * *

By March 12 the State Health Department Bureau of Laboratories had performed 39,947 Kahn tests. Of these 37,612 were negative, 71 reactions were doubtful, and 1,331 specimens were unsatisfactory. Positive Kahns totalling 933 were reported, a percentage of 2.3.

Arrangements have been completed with the Bureau of Laboratories to have Kline, Kolmer, or Wassermann reactions performed on the few cases where the Kahn test may appear to disagree with the clinical findings.

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State Medical Officer,
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Issued Monthly Under the Direction of the Council
Volume 40 April, 1941 Number 4

# Dermatitis and Eczema

## Industrial Aspects*

By John Godwin Downing, M.D.
Boston, Massachusetts

John G. Downing, M.D.
*M.D. Harvard Medical School, 1915. Assistant Professor of Dermatology, Tufts College Medical School; Dermatologist at St. Elizabeth's Hospital, Boston City Hospital, Beth Israel Hospital, U. S. Public Health Service. Chairman, Section of Dermatology and Syphilology, A.M.A., 1939-40. Member, Board of Directors, American Academy of Dermatology and Syphilology. Member, American Dermatological Association, New England Dermatological Society, Society for Investigative Dermatology, Industrial Surgeons.*

■ There has never been a time in the history of the world when the problem of keeping men fit for industry has been more vitally essential than in these days of mechanized warfare. Industrial medicine visualized this problem and since the First World War has made rapid progress. The importance of preventing industrial diseases is now recognized, especially protecting the skilled worker from avoidable hazards, for the loss of such workers might cripple our national defense. Industrial dermatoses, which comprise nearly 60 per cent of all occupational disease, require special consideration, for according to Lane,[12] Osborne and Jordon[13] they can be prevented. Eight years ago I mentioned the apparent lack of interest in this field in America,[5] but there has been a great awakening. The literature on the subject is now enormous; physicians are eager for knowledge; industry has realized the value of safeguarding its employes, and new states are continually expanding their laws to embrace occupational dermatoses among compensable diseases.[8]

*Presented at the Seventy-fifth Annual Meeting of the Michigan State Medical Society, Detroit, September 26, 1940.

### Definition

The committee appointed by the Section of Dermatology and Syphilology of the American Medical Association for the study of occupational dermatoses has defined an occupational dermatosis as any pathological condition of the skin for which occupation was the chief causal or contributory factor. It may comprise any lesion from a simple erythema to carcinoma. Occupational dermatitis (ergodermatitis) under the generic term "dermatitis venenata" is an inflammatory disease of the skin characterized by erythema, edema, and vesiculation, and caused by irritants contacted while at work.

### Classification

**Because of the multiplicity and diversity of such irritants some effort at classification is necessary, although no one will be entirely satisfactory. Classification of industries is of little value except where dermatoses appear fairly constantly, for industries change their processes frequently and use many new combinations in these processes.**

Classification according to pathological lesions also has its shortcomings, since nearly all irritants produce varying degrees of pathological change, depending upon the intensity and duration of the application. The most scientific classification is based on the etiology, the type of agent.[6] Irritants accordingly may be grouped as follows:

1. Mechanical or physical agents. The dermatoses caused by this group are the results of heat or cold, radiation (radium, x-rays), electricity, mechanical irritation (pressure or friction, cuts or pricks), and mechanical interference with bodily functions. The cause and pathological sequences of resulting injuries are easily recognized. Mechanical abrasions due to repeated trauma, harsh detergents, cutting oils, and contact

with abrasives and sand are frequent. Lesions may vary from pigmentation to epithelioma. The common eruption from mechanical interference with bodily function is a folliculitis occurring on the skin of employes contacting oils and silicates.

2. Flowering plants and their products. (a) Redwood, teak, cocobolo, mahogany, boxwood, satinwood, Brazilian walnut, chestnut, and oak are woods which may cause a dermatitis.[14] (b) Extracts and resins including oil of cardiol from the shell of cashew nuts and lacquers. (c) Herbaceous plants[15] (leaves, flowers, fruits, or roots.) Asparagus, barley malt, celery, chamomile, flax, grain dusts, hops, pyrethrum, rice, tobacco, tulips, lettuce, figs, oranges, and lemons have been proven to be offending agents. It is interesting to note that it is the outer surface of lemons and oranges that causes dermatitis.[10]

(3) Vital agents. The vegetable kingdom with its fungi, bacteria, yeast, yeast-like organisms, and molds, produces serious industrial diseases, disabling and even fatal, such as folliculitis, furunculosis, streptococcus infections, anthrax, erysipeloid, sporotrichosis, and coccidoidal granuloma. The animal group comprising mites and spiders causes annoying but trivial eruptions which respond readily to applications containing sulphur.

4. Chemical agents. These are so complex that they defy any exact classification. They may be divided into: Inorganic compounds, acids, bases and salts, hydrocarbons and crude coal tar products, oils, tars and turpentine, and other organic compounds such as dyes.

**A comprehensive list is impossible, for every conceivable chemical may irritate and produce a dermatitis in some susceptible individual. Hence, an occupation should not be condemned because of a hypersensitive worker; transfer him rather than abolish a process thereby depriving other workers of their livelihood. The true hazards are soon recognized, such as arsenic, chrome compounds, chlorinated naphthalenes, rubber accelerators, pitch turpentine, creosote, and bakelite resins.**

### Dermatitis and Eczema

Ergodermatitis may be also classified according to the strength of these agents and the length of exposure as nonsensitization dermatitis (often called dermatitis artificialis or traumatica) and sensitization dermatitis. Where the former ends and the latter begins cannot always be determined. Nonsensitization dermatitis is caused by a primary irritant which will affect practically all human skins. It is a cutaneous disturbance caused by mechanical or physical agents or primary irritants such as powerful chemicals applied accidentally or deliberately to the skin. It is characterized by all degrees of inflammation and frequently marked by destruction of all the layers of the skin and subjacent tissues. The causative factor is usually recognized and known to the patient. Noteworthy are .self-inflicted eruptions (dermatitis factitia) produced to invoke sympathy, escape unpleasant duties, or secure compensation or remuneration. These present many bizarre and unnatural patterns and must be considered in the differential diagnosis of industrial dermatitis.

Sensitization dermatitis, also called eczema, contact dermatitis or contact eczema, allergic dermatitis or allergic eczema, is an inflammation resulting from repeated exposures to substances innocuous to a normal skin. The condition presents the usual lesions of dermatitis and is primarily an epithelial reaction with secondary inflammatory changes in the corium. The disease may be specific or nonspecific and is usually acquired in extrauterine life. In occupational eczema this hypersensitivity is so acquired. A review of my last 500 cases showed only one with a positive family history; thirty-three, or 6.6 per cent, disclosed a previous history of cutaneous eruption and of these thirteen, or 2.69 per cent, had been classified as industrial. The onset of a sensitization dermatitis is rarely manifested by a sudden explosion except when a person has contacted a substance for years, avoided contact with it, and has a renewed exposure, at which time his sensitization may appear suddenly and explosively.

**When a worker presents a dermatitis it is important both from the viewpoints of economics and public health to decide immediately whether it is occupational or non-occupational and whether it is contagious or infectious. If the latter is true, the worker may infect others; if the former, the work may affect others. A knowledge of dermatology will decide the differentiation of the cutaneous disease, while an understanding of the work involved may solve the industrial question.**

## Diagnosis

The diagnosis of an occupational dermatitis is fairly obvious to the trained observer; nevertheless a complete physical examination and laboratory studies should confirm this diagnosis and determine if possible any predisposing factors. The causative factor should be established by careful history-taking and patch testing. A complete investigation should be made of the family and personal history. This history-taking should present a mental picture of the patient's routine and his contacts at home, at his pastimes, and at his work. In industrial pursuits the exact time of occurrence is especially important. An eruption appearing immediately after a vacation should lead one to suspect a non-industrial exposure; one appearing at the beginning of a day's work may suggest predisposing home factors such as worry and lack of sleep; one at the end of the day's work may indicate excessive fatigue, carelessness as a result of a rush season, or failure to use preventive measures. However, the incubation period varies so greatly that a keen detective instinct is required to solve these problems. In a recent survey young untrained workers were found most susceptible to occupational dermatitis.[3] The introduction of new chemicals or the treatment of trivial injuries with sensitizing drugs should be specially investigated. From an economic point of view the day of the onset will determine which insurer is liable for a disabling dermatitis. The cause of industrial contact dermatitis due to a single sensitization is frequently solved, but difficulties multiply with the polysensitized person. Painstaking history, however, will narrow the field of possible irritants and avoid needless patch testing.

*Sites of Eruptions.*—The sites of the eruption of an industrial dermatitis vary according to the contacts, involving for the most part the exposed areas such as the hands, arms, and face. Usually one or more parts are affected. The frequency with which various parts of the body are affected is interesting. Nine per cent of 1,004 cases investigated showed a dermatitis over miscellaneous regions. The following percentages were obtained from splitting up cases in which more than one part of the body was affected and distributing the data anatomically. The hands (47 per cent) were most frequently involved, followed by the fingers (13 per cent), forearms (7 per cent), the feet and legs (each 5 per cent), the face (4 per cent), and the arms (2 per cent). The initial lesion and its location are important, for a dermatitis tends to appear at the site of maximum contact. The average worker in any given trade shows a fairly consistent history of the site and character of the onset and presents an eruption which is reasonably characteristic. For example, the eruption of the chocolate dipper generally begins on the right fourth and fifth fingers and the outer half of the dorsum of the right hand; the dry fissured appearance of the tips of the right first, second and third fingers with separation of the free border of the nails suggests a treer's dermatitis;[7] hairdressers frequently exhibit inflammation of the adjacent aspects of the third and fourth fingers of the left hand due to holding the hair; a dishwasher's hands are markedly edematous, with maceration of the interdigital spaces; the baker's hand has a similar appearance with the additional factor of an eruption on the lower half of the ulnar area of the right forerm due to the rotary motion in kneading dough; a tanner presents a hide-like appearance of the forearms; the bricklayer and mason show a dry parchment-like skin, with occasionally a folliculitis on the anterior aspect of the right thigh where the trowel is carried; the shoedresser discloses a dermatitis of the dorsum of the first, second, third, and fourth fingers of the left hand, especially at the tips where he holds the sponge; a soda-fountain clerk presents paronychias and vesicles on the lateral aspects of the fingers of both hands, with enlargement of the epitrochlea and axillary glands; a shoe-trimmer's dermatitis is present on the dorsum of the thumb, the radial aspect of the index finger, and the dorsum of the hand over the first and second metacarpals; workers wearing heavy rubber gloves such as linemen show infiltration and erythema, with characteristic minute papules on the dorsa of the hands and the anterior aspects of the wrists; a machinist or worker who comes in contact with oil shows a typical folliculitis of the forearms, hands, and anterior aspects of the thighs; a fisherman presents a lichenified eruption over the lower ends of the ulnars, frequently complicated by small furuncles. An eruption involving the anterior aspect of the body and the face suggests exposure to steam such as the work of a kettleminder would entail. An eruption

about the ankles is usually due to trimmings and floor dust. These characteristic lesions are usually found in seasoned workers who have gradually acquired a sensitization which appears slowly and progressively and which is not due to some recently introduced chemical.

### Patch Tests

In dermatology, especially industrial dermatology, patch tests are more effective than scratch or intradermal tests.[2] The technic of such tests is now familiar to all so that I will merely mention in passing that I now use scotch cellulose tape bound with narrow strips of adhesive at the edges to hold the test substance in place. It rarely gives a reaction such as frequently occurs after adhesive, and allows observation of the test substance without its removal. Early American advocates of these tests, Wise, Sulzberger, and Coca, advised against the use of too strong or too weak solutions or failure to reproduce the clinical exposures, the proper test sites, the danger of using too many closely allied substances, their use during phases of hyper- and hyposensitivity, and indiscriminate patch testing with stock collections.[1,16] Experience has taught discretion. These tests are of value when corroborated by clinical data, and the amelioration or exacerbation of symptoms on elimination or reëxposure to the proven irritant. Positive patch tests must produce a reaction similar to the disease from which the patient is suffering. Volatile solvents and essential oils should not be covered with occlusive dressings, for if a patient is sensitized he may suffer a marked exacerbation of the existing dermatitis. A positive reaction after seven days is usually a sensitivity produced by the test itself. Patch tests with rubber are prone to be delayed and show a tendency to flare up for periods of weeks and months. After the tests have been applied the patient should remain at the physician's office for at least an hour and the test sites should be scrutinized before dismissal. If negative, the test may be replaced and the site examined the following day. Negative sites should be examined repeatedly. Positive tests do not necessarily prove that the test substance is the cause of the dermatitis, nor does a negative test absolve it. Recently I read an article in an industrial magazine, by an industrial physician, in which he stated that during preëmployment examinations he gave patch tests with phenol formaldehyde resins in which he "superficially scarified the skin and many of the new workers were found to be hypersensitive, showing a reaction immediately or within twenty-four hours." It is evident that the patch test performance is not yet clearly understood. The skin should not be traumatized before or during the application of the test substances. Oil from uncooked cashew nuts, for example, is a primary irritant. Such irritants should never be used in patch testing sensitized persons, as they will react intensely to the slightest amount. Patch testing with essential oils, such as cashew nut shell oil[4] and oil of cinnamon, may precipitate a generalized reaction which will leave the patient so sensitized that he may succumb to the weakest solutions.

**Preëmployment patch tests are not feasible, even when a hazard inherent in the industry concerned is involved, for the method is not dependable. Negative reactions may impart a false sense of security with resultant disaster. Application of chemicals under occlusive dressings for twenty-four to seventy-two hours does not parallel an ordinary industrial exposure. False positive reactions cause unnecessary rejection of applicants or needless expenditures to eliminate hazards which in reality do not exist. False negative reactions are deceiving. It is impossible to test adequately for airborne poisons, physical agents and their influence, trauma, powders and oils which interfere with bodily functions, or vital agencies, or to reproduce the ever-changing chemical combinations of an industrial process or the prolonged contact day after day with weak solutions or steam.**

Dermatologists have all obtained negative results with an alleged irritant, and then observed a prompt outbreak when the patient returned to work. With such clinical evidence, negative reactions to patch tests should be disregarded. I do not believe that preëmployment patch tests on workers are practical but I do believe that new chemicals in industry should have preëmployment tests, made either upon subjects who will not later work with these chemicals or on guinea pigs.

### Legal Aspects

In states where compensation laws enumerate the various occupational diseases covered there

may be little question about a disturbance or disease of the skin, but in jurisdictions like Massachusetts where occupational diseases as such are not compensable and a personal injury must be proved, the doctor must know what the words mean. The Supreme Judicial Court of Massachusetts (in Panagotopulos' Case, 276 Mass. 600) said that it can be "found that industrial dermatitis, though termed a disease, is traceable to a 'personal injury' within the meaning of the workmen's compensation law (S. 26), and is not a 'simple disease resulting from employment." Furthermore, the "personal injury" for which compensation is payable is "physical deterioration flowing immediately from corporeal collision with a foreign substance set in motion by the business of the employer performed by the employe by virtue of his contract of service." (Sullivan's Case, 265 Mass. 497.)

Following these decisions the Massachusetts industrial accident board allows compensation for dermatitis caused by industrial irritations and for non-industrial dermatoses aggravated to the disabling stage by contact with irritants on the job. The board-members have no list of compensable and non-compensable skin conditions but treat each particular case on its own merits. In one instance a board member accepted a physician's opinion that a generalized cutaneous disease was due to industrial irritation although experts considered it to be a non-industrial psoriasis.

Medical testimony that a dermatitis was caused by contact with some chemical at work has been held sufficient to justify an award, even though the injurious chemical was not established nor could the evidence determine whether contact was by touching the skin or by inhaling vapors. (Robinson's Case, 1938 Mass. Adv. Sh. 417.)

Partial disability as well as total disability compensation is available under most compensation acts. Thus a workman who has acquired a hypersensitivity which prevents his working at a particular job, but not to employment in general, is protected. (McCann's Case, 286 Mass. 541.)

Recently the Massachusetts legislature adopted an amendment to permit the industrial accident board to refer a claim of industrial disease to three impartial physicians. These are allowed to examine the claimant, study the pertinent medical records, and investigate working conditions. Their opinion as to the extent and cause of disability is binding upon the parties and cannot be rebutted. The constitutionality of this statute is being debated extensively, but until invalidated by the Supreme Judicial Court it is the law. This provision obviously prevents both employe and insurer from having a trial on the claim of industrial disease. However, workmen's compensation insurance coverage in Massachusetts is voluntary for both employe and employer. If either does not want insurance he can take his chances at common law. On such reasoning the statute would seem to be constitutional.[9]

Patch tests are assuming unexpected and unwarranted legal importance. A physician cannot testify to results unless he himself performed the tests. Courts have recently questioned whether it was good medical practice to fail to do patch tests, and injunctions are being issued on the assumption that the test substance used was not the one which caused the trouble but merely looked like it. I recently had an opinion ruled out by the Commissioner at the industrial accident board because I could not remember whether the insurer or the patient had brought the patch test materials to my office one year before. Tests with stock solutions cannot be admitted as evidence.

### Treatment

When a worker suffers from an occupational dermatitis the sooner he is removed from his work the speedier will be his recovery. If his eruption is severe locally, with intense edema and vesiculation, or extensive in its distribution, hospitalization is advisable, particularly where both hands are affected. Warm wet dressings are of value. The alteration of two per cent boric acid solution with a solution of potassium permanganate, 1-5000, constantly for twenty-four to forty-eight hours has been found effective. If there is considerable pruritus, aluminum acetate, 5 grams in 100 c.c. of water, will often give prompt relief. With the subsidence of the edema and a resulting oozing and desquamation of the skin, lotions and pastes will be next in order. If there is any suggestion of infection, 5 to 10 per cent of sulphoichthyolate of ammonia (ichthyol) may be added. Soap and water should be avoided. The skin should be cleansed with mineral or olive oil and should be sponged with either a 2 per cent hot boric acid solution or the following solution which should be used in the quantity of a tablespoon to a quart of hot water: potassium chlorate 30, sodium borate 30, sodium bicarbonate 60. Persist-

ent pruritic patches may be treated later with ointments containing oil of cade or crude coal tar or monacetate of pyrogallic acid (leningallol). However, the prolonged use of ointments seems to irritate these dermatitides, especially where they have become secondarily infected by bacteria. Treatment with dyes may then be beneficial. Gentian violet and brilliant green may be used in varying strengths and combinations such as: brilliant green 1.2, gentian violet 1.2, alcohol 60, and water 60. Various industries have vainly sought specific remedies for prompt relief of their employes' cutaneous eruptions. It must be remembered, however, that once the skin is injured, the first principle of treatment is rest, sufficient for normal processes to heal the affected part. The physician must use only soothing remedies. Idiosyncrasies to drugs such as mercury, resorcin, and picric acid, should be anticipated and guarded against by pretherapeutic patch testing. The average period of healing is about six weeks. Ultraviolet radiation is of value if it is not used too soon; the same holds true of x-ray therapy. Coöperation of the patient is essential and the physician soon discovers if he is dealing with a malingerer.

### Prevention

Klauder and his associates,[11] in an excellent article, found that in many cases, trade dermatitis is really not caused by the substances encountered at work, but rather with their removal by methods harmful to the skin. The importance of mechanical devices in the prevention of industrial dermatitis and the need of education of workmen and others concerned are emphasized in these studies, which include discussions of the use and abuse of soap, and soap substitutes, proper and improper employment of emollients, unnecessary exposure of the skin to primary irritants and to sensitizing substances, use of a brush instead of a cloth, use of a tool instead of the hand, use of protective sleeves, and provision of simple and easily provided facilities and preventive measures.

They discuss the value of protective hand creams and suggest several formulæ, the most practical one in my opinion being: white wax 10, hydrous wool fat 6, sulphonated olive oil 10, petrolati 75. They advise the application of olive oil, neat's-foot oil, or linseed oil before work for men whose hands become soiled. This facilitates the removal of dirt, grease, and grime, especially if the oil is applied again to the soiled parts and removed with a clean cloth before washing with soap and water. As a substitute for the mechanic abrasive soaps, equal parts of sulphonated neat's-foot oil and liquid petrolatum containing 25 per cent gelatin are added to white granulated corn meal in the proportion of 1½ parts by weight of the corn meal and 1 part by weight of the oil mixture. At the end of the day's work equal parts of hydrous wool fat and olive oil, cottonseed oil or neat's-foot oil should be rubbed on the skin. A formula containing sulfonated neat's-foot oil 45, light liquid petrolatum 45, gelatin 25 per cent aqueous solution 10, is recommended as a satisfactory detergent and exerts more of an emollient action. Oatmeal flour, especially when combined with boric acid solution instead of water, is suggested for cleansing the hands of patients with eczema.

**Prevention can be achieved by education; hence, public lectures to the laity and talks to employers and workers are important. The latter in particular should be told about irritating contacts, such as poisonous chemicals and plants. Labeling is also essential in the case of all volatile solvents and irritating chemicals. Even though a laborer suffers a mild dermatitis he may, under careful observation, continue his work and later become desensitized. This happened in my own experience to various bakelite molders, treers, and even mica workers, who under treatment were enabled to pursue their chosen trades.**

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# Forensic Psychiatry In Michigan*

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■ Prior to the termination of the eighteenth century the psychiatrist played little or no role in the criminal court as the court would entertain no defense on the grounds of insanity other than "absolute madness." However, the concept became gradually less narrow during the first half of the nineteenth century, when such terms as partial insanity and delusional insanity came into vogue. A truly scientific presentation of the findings of the psychiatrist continued to be hampered by the philosophical considerations of the "knowledge of right or wrong" and the strictly punitive approach. Progress was further restricted by the opinions of the judges formulated after the famous McNaghton trial of 1843. The tendency to pursue a very literal interpretation of these opinions has persisted to date. From a legal viewpoint an individual is either perfectly sane, or absolutely insane. The inflexibility of this concept has made expert testimony difficult, particularly in borderline cases. In order to convince the jury of a defendant's sanity or insanity, attorneys have indulged in a form of questioning which has done much to degrade the statements of the psychiatrist in court. Throughout such procedures there has been a tendency to focus the attention of the court on some isolated symptom or feature of the personality, thus avoiding a presentation of a complete study of the individual as a whole. Very able lawyers and psychiatrists have made numerous attempts to change the punitive procedure and philosophy so that emphasis might be placed on the individual rather than the crime. Despite such efforts there has been no appreciable change in attitude until very recently.

As a reaction to public interest and feeling, the Michigan State Legislature has made various attempts during the past several years to obtain more adequate control over criminal sexual psychopaths. As a result of these efforts the Public Acts of 1939 contain two laws that deserve the attention of the medical profession and are of particular concern to psychiatrists. Act No. 165 is for the purpose of defining and controlling criminal sexual psychopaths and Act No. 259 provides for psychiatric examination of individuals charged with murder. With the advent of these new laws psychiatric testimony assumes increased importance and in order to meet this responsibility adequately it would be decidedly advantageous if a certain uniformity of attitude and approach could be cultivated.

In order to control criminals with a propensity for the commission of sexual offenses the State of Michigan found it necessary to forsake the punitive approach and to consider such individuals as psychopathic personalities. Although the law concerning sexual psychopaths was promoted primarily to permit the control of such individuals, it does secondarily permit the cultivation of a much more scientific approach to crime. Under the procedure which it provides the psychiatrist can present a complete case study, including the defendant's social background, personality development, the psychodynamics of his behavior, including if he wishes, recommendations and prognosis. Since such case studies can be presented in writing and since it is unnecessary in most instances for the psychiatrist to appear in court, the confusing and misleading questioning previously indulged in is thus largely eliminated. It is to be expected that if the psychiatrist presents complete, practical, and conservative case studies his reputation in court will be appreciably improved and the advantages of individualized criminology will become at once obvious. If the courts can be convinced of the practicability of study and treat-

*Based on a paper presented to the Michigan Society of Neurology and Psychiatry, March 14, 1940.

ment rather than punitive procedures it will become less difficult to fulfill the recommendations of the American Bar Association. These recommendations include in brief: Psychiatric service in every criminal and juvenile court, a psychiatric study before sentence is passed by the judge, a similar service in every penal and correctional institution, and a similar report before transfer or release of any prisoner.

Such progress having been accomplished, the second step would be the development of a tribunal composed of psychiatrist, psychologist and social investigator working as a team in cooperation with all courts and correctional institutions.

**The third step would be the most radical and would envisage the abandonment of the present punitive philosophy entirely. Under the proposed regime the jury would become purely fact-finding in character and defendants instead of being sentenced would be committed to a treatment commission. This commission, composed of educator, sociologist, psychiatrist and criminologist, would after a period of study and investigation designate the type of treatment to be followed, such as education, trade training, psychotherapy, et cetera.**

Probation would similarly be under the supervision of this group. Those individuals who were not found to be amenable to treatment or probation would remain under protective detention for an indefinite period. It is readily seen that such a program would not burden the state hospitals with psychopaths but would, on the contrary, place more psychiatrists and other scientifically minded individuals in the field of criminology. The initiation of such a program would be at first costly but would become in the course of years more economical than the present punitive approach and would, furthermore, constitute a sound scientific and social advancement.

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### INCREASED WISDOM

A man should never be ashamed to admit that he has been wrong. It is another way of saying that he is wiser today than he was yesterday.—*The Journal of the Michigan State Dental Society,* April, 1940.

# Chronic Non-Tuberculous Lesions of the Lungs*

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■ There are certain portions of the body which, by virtue of their anatomic structure, are more amenable to diagnosis by the roentgenogram than by many other methods. With this advantage of diagnosis at hand, we owe it to ourselves as well as the patient to recognize and comprehend any deviation from the normal chest film. Such a field in medicine is chronic nontuberculous lesions of the lungs, and it is the purpose of this paper to enumerate and differentiate by means of the roentgenogram those chronic lesions that are the greatest diagnostic problems.

We must never lose sight of the value of a correct history from the patient, for the roentgenogram of the chest without history as to occupation, duration, and clinical symptoms is nil. The importance must be exceptionally stressed in the differentiation of pneumoconiosis from pneumomycosis or simple passive congestion of a decompensated heart.

For convenience in presentation, the following grouping will be followed.

1. Normal chest variations
2. Passive congestion
3. Chronic pneumonitis
4. Chronic bronchitis
5. Bronchiectasis
   (a) Saccular
   (b) Cylindrical
6. Lymphoblastoma
7. Pneumoconiosis
   (a) Without pneumonitis
   (b) With pneumonitis

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8. Abscess
9. Cystic disease of the lung and pneumocele
10. Pneumomycosis
    (a) Blastomycosis
    (b) Aspergillus
    (c) Actinomycosis
11. Infiltrative carcinoma
12. Bronchogenic carcinoma
    (a) With atelectasis
    (b) With abscess

### Types of Chests

Normal lungs may be found in a various number of deformed chests. The rachitic chest is one typically characterized by the rachitic rosary, Harrison's groove, and a prominent sternum. The long, flat chest is the type commonly met with in pulmonary tuberculosis. The thorax is elongated; the elliptical shape of the ribs is flattened, and the subcostal angle is acute. The barrel chest form tends to become cylindrical with a greater cubic capacity. The ribs are elevated and everted; the Louis' angle becomes prominent.[15]

### Passive Congestion

Passive congestion is to be found almost invariably in some cardiac affection. Probably the most common form is that known as hypostasis. The roentgenogram usually shows the increased vascular markings due to stasis of the pulmonary veins, with an accompanying enlargement of the heart. Passive congestion is usually confined to the bases with a variable amount of fluid in the costophrenic angles.

### Chronic Pneumonitis

Chronic pneumonitis is variously described as chronic pneumonia, interstitial pneumonia, and cirrhosis of the lung. The etiology of the lesion embraces nearly every type of disease to which the lung is subjected. Properly speaking, it is the result of the potential chronicity of the primary infection. In any chronic pneumonitis of long standing duration, a varying degree of fibrosis with of course all its features develops. Chronic passive congestion sometimes leads to interstitial changes. In the chest film one visualizes a diffuse infiltration of one or both lung fields with numerous areas of density of varying sizes interspersed. There is also an accentuation of the linear markings which represents fibrosis. The tendency of an unresolved broncho or lobar pneumonia is to pass into a stage of chronic pneumonitis.

### Chronic Bronchitis

Chronic bronchitis is never a disease of the young, but contrary to the consensus of opinion it is encountered in the advancing years of those patients with faulty circulation or some chronic pulmonary condition such as asthma or emphysema. Chronic bronchitis is not to be confused with other lesions, for it is here that fibrosis about the bronchi and peripheral emphysema produce thickening of both hilum shadows, marked increase in the linear bronchovascular markings at the base, and a diffuse increased radiability of the lungs.

### Bronchiectasis

The diagnosis of bronchiectasis, especially the early stages, has been much improved in the past few years by the use of iodized oil and improved x-ray technic. Here again the diagnosis is not usually confused with other lesions. The radiologist suspects bronchiectasis from a plain chest film by the honeycombed appearance of the inner bases of the lungs. It is from this that a bronchogram is advised to rule out simple pneumonitis. With a bronchogram we can recognize two types, the cylindrical and the sacculated form. The first presents a uniformly dilated bronchus which may be likened to a glove. A subvariety of the cylindrical form is the fusiform type, in which the dilated bronchi taper somewhat at the terminal extremity. The sacculated type shows the extreme degree of dilatation; bronchi dilating at one particular point or at varied points of the same branch.

### Lymphoblastoma

Lymphoblastoma is a rare form of tumor of the lung, and reports are usually limited to a few cases. Blastoma produces an enlargement of the lymph nodes of the mediastinum and hila with a generalized infiltrative process extending peripherally (Fig. 1). This may produce a very confusing picture, especially if there is no enlargement of the hilar nodes, and one must rely upon the process of elimination of other diseases by the greatest coöperation with the clinician. Enlarged glandular elements elsewhere in the body should throw immediate suspicion on to the blas-

Fig. 1. Hodgkin's disease. Enlargement of lymph nodes of hila with generalized infiltrative process extending peripherally.

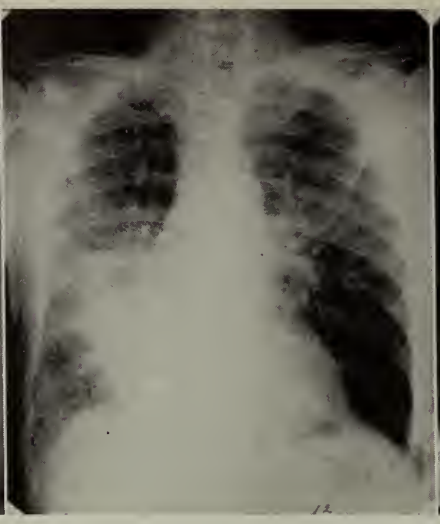

Fig. 2. Third stage pneumoconiosis with nonspecific pneumonitis of the right lower lobe.

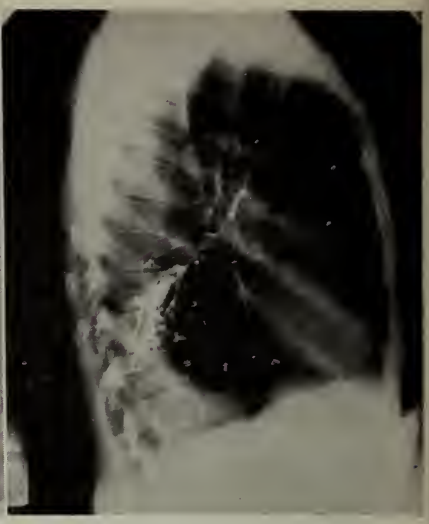

Fig. 3. Pneumocele following pneumonia outlined by means of a bronchogram.

toma group. Because of the sensitivity of Hodgkins' disease to deep x-ray therapy, it is urgent that a diagnosis be made.

### Pneumoconiosis

Pneumoconiosis is a term applied to pulmonary affections which develop as the result of the inhalation of dust. This word has become quite common due to its relation with compensation laws. There have been various names offered to designate the type of dust which is the offender. Until now we are not able to demonstrate the etiology from the chest film.[10] X-ray examination is the only certain method of recognizing the disease. In the radiograph one might class the disease according to three stages. In the first stage there is an increase in the hilum shadows with a prominence of the linear markings and bronchial shadows. The second stage is characterized by a mottled appearance throughout the lung structure which is most marked in the middle two-thirds of both lung fields. The third stage is recognized by the appearance of a diffuse fibrosis. The fine mottled appearance gradually becomes conglomerate and finally passes into a stage of dense fibrosis. Fibrous bands may be seen branching into various directions throughout the lung fields. The heart and mediastinum may be displaced or retracted from the fibrosis. It is during this transition from the second to the third stage that non-specific pneumonitis occurs as a result of the inability of the lungs to combat infection (Fig. 2). Tuberculosis is frequently superimposed.

### Pulmonary Abscess

Pulmonary abscess may be single or multiple. The single abscess may be the result of pneumonia, foreign bodies, or the inhalation of emboli from an operative field in the upper respiratory tract. The diagnosis is not difficult in the radiograph when one realizes they most frequently occur in the lower lobes in contradistinction to the tuberculous cavity and abscess in a necrotic neoplasm. An abscess usually starts with an area of hazy radiating density in the lower half of the lung field. Later, a cavity develops in which the lung markings are not well outlined. In the upright position one may see a fluid level. If the abscess remains for a considerable length of time, extensive fibroid changes in the adjacent lung tissue may develop. Multiple abscesses are very seldom chronic and will therefore not be discussed.

### Congenital Cystic Disease

Congenital cystic disease of the lung until 1925 was considered rare. Gradually various writers reported the number of cases coming under their observation, and hence the increasing importance in the differential diagnosis of pulmonary lesions. In 1934 Wood[22] reported sixteen cases at the Mayo Clinic and in 1935 Pearson[16] reported that one hundred and seventy-two cases had been recorded. In congenital cystic disease the condition may persist into adult life. In fact, they may remain silent as long as they are sterile. In most cases a number of thin walled cystic cavities are

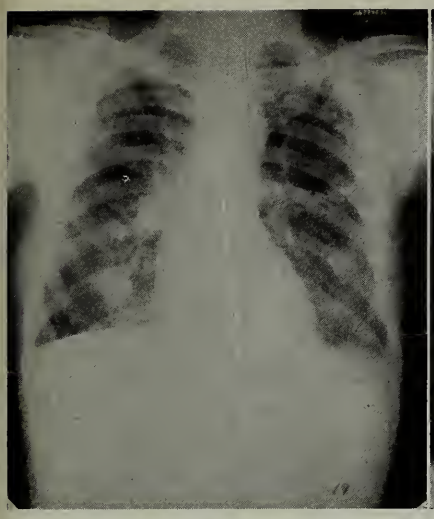

Fig. 4. Blastomycosis. Patchy-like pneumonic areas distributed throughout both lung fields.

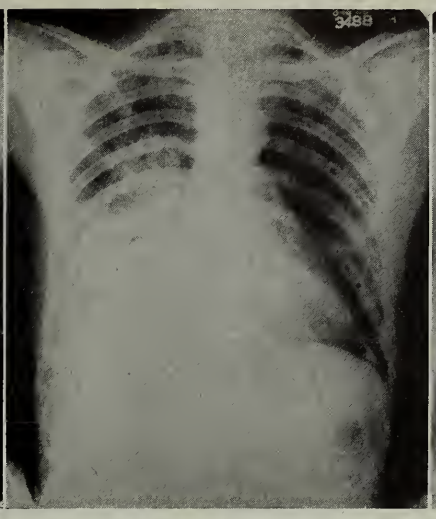

Fig. 5. Aspergillosis. Proliferative type of infiltration radiating from the right hilum into the periphery.

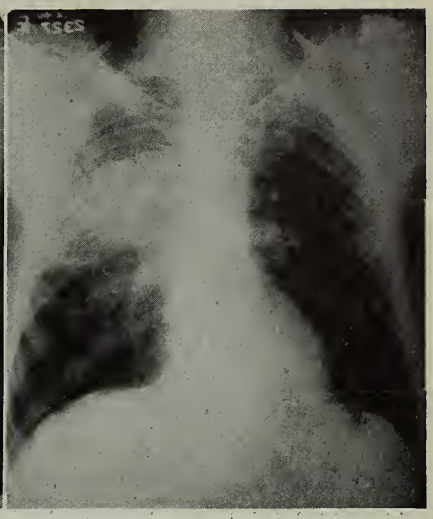

Fig. 6. Primary carcinoma of the right upper lobe. Infiltrative type.

noted with or without a small amount of fluid in them. They may be irregularly distributed throughout both lung fields. Cysts completely filled with fluid without evidence of any inflammation surrounding may simulate other pulmonary lesions. Usually a single congenital cyst filled with fluid resembles a benign tumor such as a neurofibroma, hydatid cyst, or aneurysm. In such cases the radiologist may have to be contented with the diagnosis of nonspecific tumor mass of the lung. Multiple air filled cells are often mistaken for a hernia of the stomach or bowel through the diaphragm, and it is safer then to examine the patient with an opaque media.

### Pulmonary Pneumocele

Pulmonary pneumocele, as the name implies, is a tumor filled with air. Pierce and Dirkse[17] have described it as a "localized alveolar or lobular ectasia which are a few contiguous emphysematous alveoli that tend to increase in volume slowly or rapidly and assume massive proportions." Our feeling is that the pneumocele has its origin in a lobular pneumonia which has weakened those alveoli that finally dilate. Some writers feel this is the result of a congenital weakening. The pneumocele is recognized in the radiograph by a thin walled, air containing cyst that may or may not contain fluid. There is usually evidence of a resolving pneumonic process about the area. It has been necessary in our department to resort to opaque media to rule out a loop of bowel in the pleural cavity (Fig. 3).

### Pneumomycosis

Pneumomycosis should be considered in the differential diagnosis in anyone having clinical pulmonary symptoms. Because of the rarity of the disease, it is often overlooked. It is reported that pneumomycosis was first described by Hughes Bennett in 1842.[12] Later other writers reported tuberculosis with a fungus infection of the pleura. Since then more attention has been placed on the importance in recognizing mycotic infections. It is well to state here that the diagnosis of these lesions is not primarily one of the radiologist. The roentgenologist can go far towards recognizing it, but not until the laboratory technician has isolated the fungus can one say definitely it is a mycotic infection.

*Blastomycosis.*—When blastomycosis attacks the respiratory tract, both hila and bronchi are first involved with the appearance of small bronchopneumonic-like areas distributed throughout the lungs (Fig. 4). The disease frequently is limited to the upper lobes and more often the right upper lobe. However, it may involve the entire lung field. The extent of invasions may vary from several small discrete areas of density simulating miliary tuberculosis to a large confluent consolidation of the lung. In the more severe chronic cases the confluent areas may break down, become necrotic, and produce an abscess.

*Aspergillosis.*—Chronic pulmonary aspergillosis is another fungus infection that should be considered in every patient having chronic pulmonary symptoms. The occupational history is

of some importance as it has been observed mainly in those individuals who come in contact with grain, flour and chickens. The onset of the disease is not far removed from that of an acute upper respiratory infection which continues on and is similar to chronic pulmonary tuberculosis. The roentgenogram reveals a proliferative type of infiltration radiating from each hilum into the periphery of the lung field (Fig. 5). Some have described it as a spider web pattern. As the disease continues, a varying degree of fibrosis may develop. There is an absence of calcified lymph glands and involvement of the apex which should distinguish it from tuberculosis. By no means is the roentgenogram conclusive, and one must rely upon the sputum examination and skin tests for the diagnosis.

*Actinomycosis.*—Actinomycosis is another fungus infection which is relatively widespread in cattle and is frequently referred to as "big jaw." The disease is transmissible to man through the alimentary or respiratory tract of cattle and manifests itself most frequently as a chronic pulmonary lesion. The roentgen chest examination reveals a diffuse miliary process involving both lung fields and the pleura. The infiltrative process may coalesce and become a confluent indiscrete area of opacity. As a result of the poor blood supply, necrosis and cavity formation may occur. There may be fluid in the pleural cavity due to the invasion of fungus; this being true, it is an advantage to examine the fluid for sulphur granules. Spontaneous perforation of a chest wall abscess is strongly suggestive of underlying mycotic infection. In any event the conclusive diagnosis rests upon the finding of streptothrix actinomyces.

### Primary Carcinoma

Within the past two decades our ideas regarding primary carcinoma of the lungs have undergone a sharp change. At first it was thought that the incidence of malignant disease of the pulmonary system was increasing. Perhaps this is partially correct with the increase in exhaust gases, asphalt and tar that are supposed to be a predisposing factor, but there has been an increase in the ease with which lesions of the chest may be diagnosed. The radiologist suspects it, the bronchoscopist obtains a biopsy, and the pathologist confirms it.

For the sake of convenience, in our department we divide carcinoma of the lung into two groups: (1) The infiltrative type which invades the parenchyma and only later obstructs the bronchus; (2) The obstructive type which primarily arises from the wall of the bronchus and obstructs the lumen early, causing a varying degree of atelectasis of that portion of the lung.

The *infiltrative type* (Fig. 6) represents the undifferentiated cell carcinoma which is characterized by a fan-shaped peribronchial infiltration extending peripherally from the root of the lung. There is early metastases and consequently a mass at the hilum is frequently noted. Secondary infection is a less common complication than in the obstructive type of growth.

With the *obstructive type* the problem of differential diagnosis becomes exceedingly great, especially when an inflammatory process such as pneumonia is superimposed. The decreased aeration from atelectasis promotes a fertile spot for pneumococcic growth. An inflammatory process alone can usually be distinguished by the relative absence of atelectasis and the more irregular character of the lesion. Delayed resolution of a pneumonic process in a patient past thirty-five should cause one to be on his guard for the possibility of underlying malignancy. Tumors of the mediastinum and aneurysms of the aorta may cause atelectasis. In such cases the Potter-Bucky diaphragm is necessary for greater penetration. Fluoroscopy and blood serology are extra advantages that aid in the differentiation. The opacity produced by tumors of the mediastinum does not extend into the lung as far as that produced by malignancy of the bronchi; also they are more sharply defined, and rarely produce obstruction of a bronchus.[18] A bronchogram may also be done to show the obstruction or narrowing of a bronchus from a neoplasm.

*Carcinoma with Abscess.*—The relative grade of malignancy often gives rise to another diagnostic feature, namely, bronchogenic carcinoma with abscess. The tumor mass growing rapidly destroys large numbers of vessels and thus decreases its own blood supply so that the central mass starts to degenerate. This central mass finally liquifies and is discharged into a bronchus. By so doing, air reaches the necrotic mass and produces the picture of a lung abscess on the radiograph. Pyogenic abscess may develop distal

to the neoplasm as a result of the secondary infection. The degenerating malignant area of excavation should not be confused with the smooth, thick wall cavity of a pyogenic abscess, or the thinner walled cavity of tuberculosis, or the extremely thin walled cysts or pneumoceles.[4]

Metastatic malignancy, extrathoracic irradiation, tularemia, echinococcic cyst and reaction secondary to aspiration of mineral oil are other chronic conditions which should always be borne in mind in an adequate differential diagnosis of chronic pulmonary lesions.

### Summary and Conclusions

1. This paper is presented in the hope that the physician may become better acquainted with those non-tuberculous lesions of the lungs that should be suspected in any patient with chronic pulmonary symptoms.

2. From our experience it is evident that the roentgenologic manifestation of the discussed lesions of the lungs is a most valuable diagnostic aid.

3. In a great percentage of cases the roentgenologist can recognize the abnormality or the pathology and in most of the others can contribute facts which, when coupled with the history and laboratory data, will lead to a diagnosis.

4. We have briefly discussed the salient characteristics in the roentgenogram of the chest which may aid in the differential diagnosis.

5. Any chronic pulmonary lesion is very serious and in any event the result either directly or indirectly produces a remarkable mortality rate.

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# Intestinal Suction Drainage

## In Facilitating One-stage Resection of the Right Colon*


By John B. Hartzell, M.D.
Detroit, Michigan

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■ Once the diagnosis of carcinoma of the large bowel has been made and the absence of positive evidence of distant metastases determined, it becomes the duty of the physician to see that surgical exploration of the lesion is undertaken as soon as the patient's condition will permit. In general, the main causes for delay are; the presence of a poor state of general nutrition; anemia; dehydration; and distention. Regardless of the location of the tumor, before its eradication is undertaken, much good can be accomplished by a period of preparation to allow decompression of the bowel above the lesion and rehabilitation of the patient.

Rehabilitation is brought about by hydration and feeding. The patient should be put on a high protein, high caloric, low residue diet, as well as an adequate fluid intake. We have come to feel that if any formidable operative procedure is contemplated, especially when intestinal

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anastomosis is to be done, the body should be supplied with the materials which enable it to carry on the reparative processes concerned with healing. In a recent review of the literature

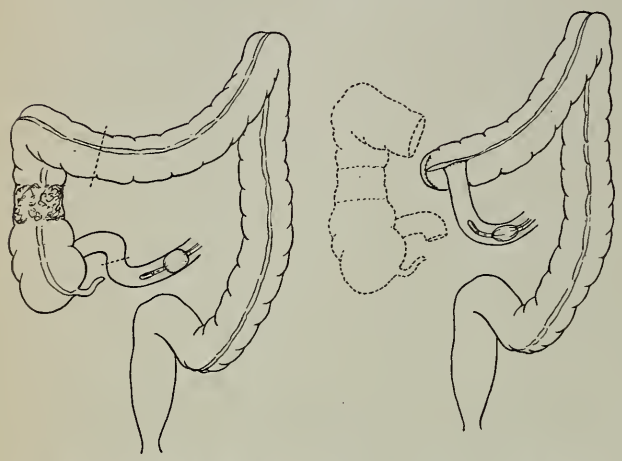

Fig. 1. (*left*) Carcinoma of ascending colon. The balloon-tip intestinal tube has been passed until the tip rests in the terminal ileum. Bowel between dotted lines is to be removed.
Fig. 2. (*right*) Right half of the colon has been resected and the terminal ileum anastomosed to transverse colon. The tip of tube with balloon deflated is allowed to remain just proximal to stoma. Constant suction is maintained.

on the subject of abdominal wound disruption, Winfield and myself[1] found that in a series of 1,458 collected cases of wound disruption 33 per cent occurred following operations for carcinoma or for peptic ulcer. During the past year, working with Irvin,[2] in the course of some 200 determinations of the concentrating levels of plasma vitamin C and serum protein, we were amazed to find routinely low values in all cases of malignant disease of the gastro-intestinal tract. We have therefore made it a routine to restore the serum protein level to approximately 7 gms. and the plasma ascorbic acid concentrations above .7 mgm. per 100 c.c. of blood plasma. If anemia is present, the red count should be brought to normal with blood transfusions, and blood plasma transfusions may be used as an adjunct to feeding in bringing the serum protein levels up to normal.

### Decompression of the Bowel

We have come to believe decompression of the bowel is fully as important in the preparation of the patient as rehabilitation. In the presence of distention from a varying degree of obstruction, rehabilitation cannot be accomplished until decompression has been satisfactorily brought about. Decompression of the bowel, depending upon the degree of stenosis and the location of the tumor, is now done in several ways. Occasionally in a low growth, one easily reached with the proctoscope, it is possible to pass a rectal tube beyond the stenosed area. Following this procedure, gentle rectal irrigations are given and the accumulated fecal material above the tumor is removed. Not infrequently, after the bowel has been thoroughly emptied, the stenosed area opens up sufficiently so that the patient may be able to go to stool normally. If the growth is higher in the colon, simple irrigations alone will sometimes accomplish this result. Gentle purging, as suggested by Jones,[3] may help in the removal of solid fecal material above the tumor, but this should be done carefully and only if the obstruction is not complete. When these methods do not promptly relieve the distention, it may be necessary to do a cecostomy or a colostomy. As an adjunct to the handling of the problem of distention from a partial to complete large bowel obstruction, we have recently been accomplishing decompression by means of the balloon-tip intestinal tube, the tip of which passed into the lower ileum and serves as an efficient enterostomy. During the past three years, on the Surgical Service of Receiving Hospital, this tube has been passed in over 150 cases of organic bowel obstruction. Johnston and his co-workers[4] have proved this to be of decided value in the decompression of distended bowel, and in the treatment of obstruction.

*Miller-Abbott Tube.*—In any obstruction of the colon we do not hesitate to introduce the balloon-tip intestinal tube into the intestine. If the obstruction is situated in the left colon, intubation may not afford prompt relief and other means of decompression must be employed. It must be remembered that prompt relief of the distention, that is the emptying of the colon, is essential and a cecostomy or colostomy may be necessary depending upon the location of the tumor, completeness of obstruction, and evidence of reflux into the small intestine. In obstruction situated in the right half of the colon, intestinal intubation may prove an efficient means of relieving distention, and, generally speaking, the closer the obstruction to the cecum, the more good can be accomplished by this method.

It is a well recognized fact that, in the presence of gastric or intestinal distention, operation upon the gastro-intestinal tract is more hazardous,

not only because of increased danger of spill of intestinal content, but because of interference with healing at the suture line. The use of gastric suction by means of a small nasal catheter has long been employed in operations upon the stomach, both before, during and after operation. If intestinal surgery is contemplated in the lower reaches of the intestinal tract, we feel it even more important to take measures which will eliminate the possibility of distention. Rankin[6] recognizes this danger, and in performing a one-stage removal of the right colon, advises a complementary ileostomy 20 to 30 cm. above the anastomosis. The blood supply of the small bowel and the colon is normally not as rich as that of the stomach, with the result that distention may have an even more disastrous effect upon healing of the suture line. When possible, we pass the balloon-tip intestinal tube before operation to a point in the intestine just proximal to the probable site of anastomosis (Fig. 1). Not infrequently there is some swelling and edema about the site of the stoma which tends to occlude it sufficiently to obstruct the passage of intestinal content. Aspiration just proximal to the stoma obviates distention (Fig. 2). Leigh and his associates,[5] and Ravdin and Abbott[7] have recently advised this procedure.

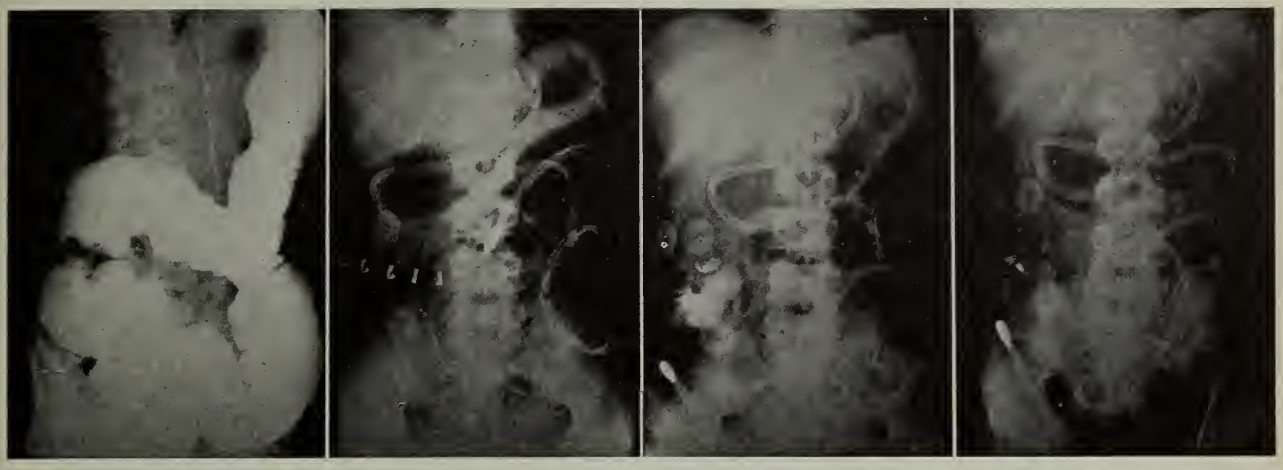

Fig. 3. (*left*) The colon is shown outlined with a barium enema. A characteristic stenosed filling defect will be noted in the center of the transverse colon. The diagnosis—carcinoma of the ascending colon.

Fig. 4. (*right*) Flat x-ray plate of the abdomen on first postoperative day. The skin clips and wire tension sutures will be noted in the transverse type incision. There is a mild distension, consequently the balloon was inflated and passed until the tip was in the vicinity of the stoma giving relief of the distension.

Fig. 5. (*left*) X-ray taken on the tenth postoperative day. A small amount of thin barium mixture was injected down the tube. This will be seen as a small puddle just proximal to the stoma.

Fig. 6. (*right*) X-ray taken the following day after the tube had been clamped for twenty-four hours reveals that there is no distension and only a few flakes of barium remain in vicinity of the stoma. The tube can now be safely removed.

### Typical Case

The following case is illustrative of the advantage of intestinal intubation in the preparation of a case in which the right half of the colon was removed for an obstructing carcinoma of the ascending colon. It also illustrates the value of suction drainage at the operative site in controlling distention postoperatively, and in facilitating operation.

The patient, a fifty-nine-year-old male, was admitted to the Surgical Service with a one-year history of vague abdominal pain, occasional nausea, a gradual increase in the number of stools, and some weakness without weight loss. Examination revealed a moderate abdominal distention and a tumor in the right loin. A proctoscopic examination was negative. A barium enema revealed a characteristic filling defect (Fig. 3). The balloon-tip intestinal tube was passed until the tip lay in the lower ileum, with relief of the abdominal distention. The patient was put on a high protein, low residue diet, and given several blood transfusions. He was also given 500 mgm. of vitamin C daily, and one week later operation was performed, and a large obstructing carcinoma was found in the ascending colon. The ileum was severed about 5 inches from the cecum, and the proximal end anastomosed to the transverse colon. The distal portion, together with the cecum, ascending colon and hepatic flexure was removed. The next day there was noted slight distention. An x-ray revealed the tube to be not quite far enough down (Fig. 4). Accordingly, the balloon was distended with air and the tube passed until the tip was in the vicinity of the stoma, giving complete relief of the distention. On the tenth postoperative day a small amount of barium was injected down the tube. This will be seen as a small puddle just proximal to the stoma (Fig. 5). The tube was then clamped for twenty-four hours. The following day

the barium passed in the stool. X-ray revealed only a few flakes remaining near the stoma, and the absence of any distention (Fig. 6). Consequently the intestinal tube was removed. The use of intestinal suction drainage in this case not only permitted operation in one stage, but contributed markedly to the smooth convalescence of the patient. Two months following the operation, no evidence of obstruction at the site of the stoma was evident, barium introduced by enema passing readily into the ileum. The patient has remained well and is having regular and well formed bowel movements.

This case is presented to illustrate the advantages of intestinal intubation with suction drainage in the management of lesions of the right colon. Its use has permitted us to perform a one-stage procedure where we formerly used two stages, and with less difficulty to the patient than is usually attended with either part of the staged procedure.

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### THE WAY OF THE WORLD

In the world of yesterday women were denied sex freedom but permitted to have many children. In the world of today women are permitted larger sex freedom but are denied children. In both cases a phase of living is denied and adjustment to the situations created is demanded through the instrumentality of a palliative. In the former case the gift of children palliated the loss of freedom; in the latter case the loss of children is palliated by a means of allegedly safe promiscuity and of economic adjustment to an inequitable social order.

War should perhaps be regarded in somewhat the same light. It is a complete denial of rational living for which a number of fraudulent palliatives are offered, such as the absorption of the unemployed into the army and into wartime industrialism, and the temporary granting of favors to the underprivileged, none of which gestures touch upon the basic inequities which inure in a sick society.—*Medical Times,* April, 1940.

# Type III Pneumococcus Meningitis

## Recovery Following Sulfathiazole*


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■ Comparative studies in animals have shown that sulfathiazole is much less toxic than sulfapyridine, yet is almost as effective against the pneumococcus, and probably superior against the staphylococcus.[1,2,3,4,5,8,10] Preliminary reports in humans[7,9] are in keeping with the results in animals but much more clinical experience will be necessary to conclusively determine which is the preferable therapeutic agent. The following case is reported to record: (1) a dramatic response of a type III pneumococcus meningitis to sulfathiazole; (2) the development of bronchopneumonia during the administration of large doses of the drug; (3) the sudden appearance of renal insufficiency and sulfathiazole retention; (4) stupor, delirium and generalized epileptiform convulsions as possible toxic manifestations.

### Case Report

F. W., forty-six years old, white, female, diabetic, was admitted to Detroit Receiving Hospital, January 11, 1940, complaining of draining ears since December 26, and right-sided convulsions of five days' duration.

*Past history.*—A diagnosis of diabetes mellitus was made in 1934, when the patient consulted a physician because of pruritis vulvæ, polydipsia, polyphagia and polyuria. At that time she had an infected toe which failed to heal until she was placed on a diabetic diet

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with 10 units of regular insulin before breakfast and supper. Three years ago she discontinued insulin and ceased to follow her diabetic diet. Since then she had had intermittent pruritis vulvæ but was otherwise in fair health.

*Present illness* began on December 23, 1939, with running nose, sore throat, dry cough and bilateral earache. On December 26, both ear drums ruptured spontaneously and a purulent discharge appeared. During the succeeding week she had an irregular fever, with chilly sensations and sweats, and was confined to bed. The bilateral aural discharge continued and hearing diminished greatly. On January 4 she noticed weakness and ataxia in the right hand, which soon extended to the right arm and leg. On January 6 she had a clonic convulsion which began in the right hip, spread to the right leg, then to the right arm and lasted about a minute. During the next five days there were five to ten similar attacks daily. About fifteen seconds before the onset of each attack, she had a sense of epigastric discomfort which she recognized as a warning of an impending convulsion. During the attacks she was unable to speak but did not lose consciousness. She was not incontinent and did not bite her tongue during the convulsions.

*Physical examination* on admission revealed an apathetic white female with rather marked bilateral middle ear deafness. There was a purulent discharge in both external auditory canals and bilateral mastoid tenderness, most marked on the right. The left pupil was slightly larger than the right and both reacted well to light and accommodation. The optic fundi were normal except for a single cotton-wool patch in the left fundus and slight arterial narrowing. There was lateral and slight vertical nystagmus. The lateral nystagmus was of first degree with quick component to the left. The neck was not stiff and the Brudzinski and Kernig signs were negative. There was distinct muscular weakness with hypotonia in the right arm and leg. Biceps, triceps, patellar and ankle jerks were diminished on the right. Plantar reflexes were normal. There was definite ataxia on the right in both the finger-to-nose test and the heel-to-knee test with eyes open as well as with eyes closed. There was asynergy and dysmetria on other movements of the right arm and leg. Adiadokocinesis was present in the right arm and check movements were impaired. Sensory examination was entirely negative. The remainder of the physical examination was negative except for a blood pressure of 180/110. X-rays showed cloudiness of the right mastoid and petrous portion of the temporal bone and slight cloudiness of the left mastoid. Roentgenogram of the chest was negative.

*Pre-operative course (January 11-16).*—The temperature was normal in the morning and averaged 99.6° F. in the evening. The pulse ranged between 90 and 110. The blood sugar on admission was .286 per cent and the urine contained a large amount of glucose. There was no significant acidosis, however, since the blood $CO_2$ combining power was 49 volumes per cent and the urine contained only traces of acetone. The patient was placed upon a four-feeding diet furnishing a total of 206 grams of available glucose and received 30 units of protamine zinc insulin and 10 units of regular insulin daily. The glycosuria was reduced to a trace but the fasting blood sugar ranged between .170 per cent and .250 per cent. The patient was observed in several unilateral clonic convulsions similar in every respect to those described in the present illness. The convulsions were considered by all observers to be typical of the Jacksonian epilepsy characteristically associated with supratentorial lesions, and quite unlike the torsion movements sometimes accompanying cerebellar lesions. The remainder of the neurological examination, however, pointed to a right cerebellar rather than a cortical lesion. The hypotonia, ataxia, et cetera, increased in degree, but no new neurological signs appeared. Spinal puncture, on January 12, revealed a clear fluid under a pressure of 125 mm. water with normal Queckenstedt response. The fluid contained only 2 WBC per cu. mm. and the globulin, colloidal gold and Kline tests were negative.

*Operation.*—A right complete mastoidectomy was decided upon because of persistent purulent discharge from the middle ear together with signs of advancing cerebellar disease and was performed on January 17 by one of us (J.M.R.). The mastoid was filled with granulation tissue and contained a moderate amount of pus. After exenteration of the mastoid, the sigmoid sinus was uncovered and found to be normal. The dura of the posterior fossa was exposed in the area of Trautmann's triangle. On elevating the dural plate, a small perforation of the dura was found which led into a cyst 2 x 5 cm., which displaced the cerebellum to the left. The cyst was aspirated and a serous exudate was removed. The cerebellar convolutions could easily be seen and were distinctly flattened. The cyst cavity was lightly packed with iodoform gauze and the mastoid was closed in the usual manner. Further exploration of the cranial cavity was not attempted.

*Development of type III pneumococcic meningitis.*—On January 18, the temperature rose to 104°. There was profuse thin purulent discharge from the mastoid incision, but no clinical signs of meningitis. On the morning of January 19, however, she was irrational, the neck rigid and Kernig's sign was positive. A spinal puncture was done, revealing a cloudy fluid containing 12,100 polys per cu. mm. No organisms were found on direct smear. Since staphylococcus aureus had been recovered from the aural discharge, sulfamethylthiazole* was started on the supposition that the meningitis was also staphylococcic. Spinal fluid culture, however, showed that the meningitis was due to type III pneumococcus. In the 18-hour interval before the report of the culture, the patient received a total of 10.5 G sulfamethylthiazole without any dem-

*The sulfamethylthiazole was furnished by the Winthrop Chemical Company; the sulfathiazole was furnished by E. R. Squibb and Sons.

onstrable effect on the course of the meningitis. Spinal fluid, taken two and one-half hours after the last dose, contained 16,500 polys per cu. mm. and was still positive for type III pneumococcus. Sulfathiazole* was then substituted.

*Dramatic response of the meningitis to sulfathiazole.*—A total of 14 G of sulfathiazole was given on January 20, the first 5 G intravenously as the sodium salt, the remainder by mouth. The following morning she was mentally clear and her temperature was normal. The spinal fluid cell count had fallen to 472 per cu. mm. and organisms were no longer recovered. Sulfathiazole was continued in a dose of 2 G every four hours (six times daily) up until the morning of January 30. The meningeal signs cleared up, the spinal fluid remained sterile and the cell count dropped to 33 on January 26, and to 5 per cu. mm. on February 2.

*Development of bronchopneumonia during the course of sulfathiazole therapy.*—On January 24, the patient had a chill, followed by a rise in temperature to 104.6°. Blood culture at this time showed a nonhemolytic staphylococcus aureus. Inasmuch as four previous and six subsequent blood cultures were sterile, it seems likely that this organism was merely a contaminant. On January 25, there were physical and roentgen signs of a patchy consolidation in the left lower lobe. Previous x-rays of the chest, taken on January 12 and 19, were negative. The consolidation thus developed during sulfathiazole therapy. The blood level of free sulfathiazole on the morning the consolidation was detected was 6.7 mg. per cent. The sputa were consistently negative for pneumococcus, both on direct smear and on passage through the mouse. For this reason, and because the development of pneumonia during the administration of massive doses of sulfathiazole was most unexpected, other possible explanations for the consolidation were sought. The unilateral distribution of the lesions excluded left heart failure and made multiple pulmonary emboli most unlikely. There was no previous history nor subsequent evidence to suggest bronchiectasis. There was no evidence of massive collapse but the possibility that the consolidation began as a lobular atelectasis could neither be definitely established nor excluded. The course was compatible with pneumonia. There was moderate pleuritic pain but the sputum did not become rusty. The temperature ranged between 100° and 102° until January 29, when it fell to normal. Roentgenogram on February 3, showed only slight decrease in the consolidation but a check ray, on February 16, showed complete resolution.

*Development of renal insufficiency with retention of sulfathiazole.*—The patient received 10.5 G sulfamethylthiazole on January 19, 14 G sulfathiazole on January 20 and 12 G of sulfathiazole daily thereafter up until January 30, for a total of 127 G. Blood concentrations of free sulfathiazole were quite variable during the first week of therapy, ranging from 1.2 to 8.1 mg. per cent, the highest level being obtained on January 27. No determination was made on January 28. Between January 19 and 28, the patient frequently complained of nausea, and vomited on seven occasions. Nausea and vomiting were present before the drug was started and may have been due, in part, to the meningitis. There were no other toxic symptoms until January 29, when the patient became drowsy and disoriented. The blood concentration of free sulfathiazole had increased abruptly to 20 mg. per cent. The next morning, the blood level was 17.4 mg. per cent and the drug was discontinued. On January 31, twenty-four hours after sulfathiazole had been stopped, the blood level was 15.1 mg. per cent. Sulfathiazole excretion was very slow. The blood level was 12.1 mg. per cent on February 1; 5 mg. per cent on February 3; and was still 1.1 mg. per cent on February 7, eight days after the drug had been discontinued. There was coincident nitrogen retention, the blood urea being 96 mg. per cent on February 2 and again on February 5, then falling gradually to 60 mg. per cent on February 8 and to 38 mg. per cent on February 23. On that date, 24 days after sulfathiazole had been discontinued, renal function was still impaired as shown by a urea clearance of 46 per cent. The urea clearance rose to 87 per cent on March 13, but the ability to concentrate the urine was impaired. During the period of sulfathiazole administration and up until February 3, specific gravities as high as 1.025 had been attained in sugar free specimens. Thereafter, a specific gravity above 1.015 was not attained either in numerous single specimens or on repeated concentration tests (Olmstead method) until just before discharge when it reached 1.017. Urine specimens were examined for blood daily during the administration of sulfathiazole and during the two-week period following its withdrawal. No more than 1 red blood cell per high power field was found at any time. In spite of the absence of hematuria and the failure to find acetylsulfathiazole calculi in the urine, the renal insufficiency was considered a toxic manifestation of sulfathiazole. Paralleling the nitrogen retention, there was a fall in blood $CO_2$ combining power. The latter, in volumes per cent was as follows: 52 on January 30, 36 the following day, 27 on February 1, 20 on February 3, 30 on February 5 and 58 on February 10. Since the diabetes was well controlled during the entire period on a daily carbohydrate intake of 150 grams, the fall in blood $CO_2$ combining power was attributed to the renal insufficiency.

*Toxic manifestations referable to the central nervous system.*—On January 29, coincident with an abrupt rise in blood sulfathiazole to 20 mg. per cent, the patient became drowsy and disoriented. The next morning she was delirious, the blood level being 17.4 mg. per cent. At noon on January 30, she had a generalized epileptiform convulsion which lasted about two minutes. She had four similar convulsions during the afternoon and evening and two the next forenoon, at which time the blood level was 15.1 mg. per cent. These were the first and only convulsions since the

*The sulfathiazole was furnished by E. R. Squibb and Sons.

mastoidectomy. These convulsions differed from those which had occurred pre-operatively in that they were bilateral and symmetrical from the onset and were accompanied by loss of consciousness and followed by stupor. The question arose as to whether the convulsions and other cerebral symptoms were due to the sulfathiazole, to hypoglycemia, to extension of the intracranial inflammatory process or to cerebral vascular complications of the hypertension and nephritis. Acute nicotinic acid deficiency was not considered at that time but, in retrospect, it can probably be excluded inasmuch as a complete recovery was made without the administration of nicotinic acid or any of its derivatives. The convulsions were probably not due to hypoglycemia because one occurred while an intravenous injection of glucose was in progress (after 250 c.c. had run in); another occurred shortly after an intravenous injection of 25 G of glucose. The blood sugar taken after another convulsion was 71 mg. per cent. The fasting blood sugars had been normal since January 26. No regular insulin had been given since January 24, and the protamine insulin, which had been temporarily increased during the meningitis to bring the diabetes under control was reduced to 30 units on January 30. Neurological examination still showed slight hypotonia and hyporeflexia on the right but failed to reveal any evidence of extension of the intracranial lesion. The meningeal signs had entirely disappeared and the spinal fluid, on February 2, was under a pressure of 100 mm. and was entirely negative. There was no significant change in blood pressure, no evidence of edema of the optic discs nor retina on the days when she had the convulsions. There were no further convulsions after January 31, whereas the renal insufficiency persisted for many days. Thus, by a process of exclusion of other possibilities as well as from the fact that the stupor, delirium and convulsions appeared coincidentally with the abrupt rise of blood sulfathiazole and gradually disappeared as the blood level fell, it was concluded that the cerebral symptoms were probably due principally to sulfathiazole retention. Convulsions have been reported in animals from the intravenous injection of sodium sulfapyridine,[6] but not, to our knowledge, from sulfathiazole. It is possible that the coexisting intracranial infection was a conditioning factor.

*Other toxic manifestations.*—The hemoglobin was 10 G per 100 c.c. at the advent of chemotherapy and was at the same level on January 30, when sulfathiazole was discontinued. During the next few days the hemoglobin fell off rapidly, reaching a low point of 6 G per 100 c.c. on February 6. There was no gross hemorrhage to account for the anemia, and no evidence of hemoglobinuria nor jaundice. Ferrous sulfate was started on February 10, and the hemoglobin had returned to its original level by March 4.

*Condition at discharge on March 26.*—The diabetes was well controlled by 35 units of protamine zinc insulin at 7:00 A. M. daily. The mastoid wound granulated in very slowly and was nearly healed by the end of March. The left otitis media and mastoiditis cleared up during the course of sulfathiazole therapy without operative intervention. Hearing was practically normal. The ataxia, dysmetria, asynergy, etc., disappeared, the only residual neurological signs being nystagmus on lateral gaze and slight hypotonia and hyporeflexia on the right. The Jacksonian convulsions, which had occurred at the rate of 5 to 10 daily before the operation, did not return after surgical drainage of the cyst, which was found pressing against the cerebellum. While this would suggest that the Jacksonian convulsions were due to this cyst, the possibility of an unrecognized cortical inflammatory process which cleared up spontaneously or as a result of sulfathiazole could not be excluded.

## Summary

A case of type III pneumococcus meningitis is reported which recovered following sulfathiazole. A total of 127 grams was given over a period of ten days. Bronchopneumonia developed during sulfathiazole therapy. The course was also complicated by the sudden appearance of renal insufficiency with sulfathiazole retention, stupor, delirium and epileptiform convulsions.

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A bill has been introduced in the Maine Senate, reports the *A.M.A. Journal*, which "proposes to create a state board of eugenics which is to be authorized to order the sexual sterilization of any person living in the state who is feeble-minded, insane, syphilitic, a habitual criminal, a moral degenerate or a sexual pervert and is thereby a menace to society in that he or she may produce offspring having an inherited tendency to the social inadequacies noted."

# Radiation Therapy

## In the Treatment of Malignant Disease of the Genito-urinary Tract

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■ In general, malignant growths of the genito-urinary tract were formerly considered to be among the less favorable class of tumors in their response to high voltage x-ray therapy. This attitude was based upon the generally disappointing and unsatisfactory results obtained in trying to prevent recurrence and metastasis of the tumor by postoperative radiation after the growth has been removed as far as possible by operative interference.

In the last few years, since the first report of Waters, Lewis and Frontz[10] (Johns Hopkins), in 1934, on the pre-operative radiation treatment of kidney tumors, it has been found that most malignant tumors of the kidney, bladder and testicle are definitely radiosensitive, and the emphasis has shifted towards pre-operative radiation for the purpose of reducing the size of the tumors and devitalizing them, so that subsequent operation becomes easier, more complete, and productive of better results.

**To understand how radiation by high voltage x-rays can have this effect, it is necessary to recall that the sensitivity to radiation of any tissue depends on the degree of immaturity and lack of differentiation of the cells of which it is composed. Very cellular, rapidly growing tumors are more susceptible to radiation than are adult type cells, and this is especially true of embryonal tumors such as Wilms tumors in children, embryonal carcinoma of the ovary and testis and a few others.**

There are many variations, however, because even tumors of definitely embryonal origin contain cells of different grades of differentiation, often containing a quite high proportion of adult cells. The effect of radiation is to produce necrosis of the most radiosensitive cells, while the less sensitive cells are damaged or devitalized in proportion to their sensitivity, resulting in varying degrees of fibrosis or hyalinization which temporarily inhibit the further growth of the injured tissues. As a result of the absorption of the necrosed cells, the total volume of the tumor decreases, in rough proportion to the number of the most radiosensitive cellular elements.

### Kidney

From the study of fifteen cases of kidney tumor in 1935, Waters[9] drew the following conclusions:

1. Tumors of the hypernephroma type and embryonal carcinomas are radiosensitive.

2. Papillary carcinomas of the renal pelvis and the malignant cyst adenomas are radioresistant.

3. Irradiation has caused a striking reduction in the size of radiosensitive renal tumors and has rendered tumors which were inoperable, on account of their large size, operable.

4. Irradiation has caused extensive morphological changes in sensitive tumors, characterized by alterations in the cellular structure, extensive fibrosis, and necrosis. The cells become shrunken. The cytoplasm may contract around the nucleus, and in certain cases, the tumor has been completely destroyed and replaced by fibrous tissue.

5. Normal renal tissue is not damaged by radiation in proper dosage.

6. Reduction in size begins almost immediately after the institution of radiation, and continues for a period of several weeks after cessation of treatment.

7. Operative removal is imperative, and should be carried out within a few weeks after the first series, depending on the degree of shrinkage as revealed by palpation and pyelograms.

8. A regrowth of the tumor will occur if operation is delayed too long.

9. The pyelogram will differentiate the pelvic and cortical tumors in 80-100 per cent of the cases, and 93 per cent of all cortical renal tumors have been radiosensitive.

10. If it is found to be impossible to remove all the growth, postoperative high voltage x-ray therapy should be used. The results of inserting

radium needles into a vascular pedicle which is involved by a malignant growth have proven unsatisfactory.

Renal tumors in children, which are nearly always of the Wilms embryonal type, are extremely radiosensitive, and show a very rapid reduction in size during and after radiation therapy. The usual early and rapid metastasis of these tumors usually makes complete relief difficult, even though the metastases themselves are radiosensitive. There have recently been several newspaper reports of cases of this type. Competent observers[7] state that about 25 per cent of kidney tumors are inoperable because of size or adhesions when first seen and that pre-operative radiation will reduce the size of the kidney in all cases except those of pelvic carcinomas, which do not comprise more than 10 per cent of kidney tumors.

### Urinary Bladder

Most bladder tumors are of one of two general types, according to Ewing:[4] papillomata, of which 50 per cent become maligant, and carcinomata diffuse or adenoid.

In the case of the papillomas, whether definitely malignant or not, an exception is made to the general rule and postoperative radiation following fulguration is generaly advised. This is to prevent the recurrences which usually occur.

In the case of frank diffuse infiltrating carcinoma, about 50 per cent will be found to be moderately radiosensitive, so heavy pre-operative radiation is advised in all cases to reduce the size of the tumor and devitalize it wherever possible so that complete operative removal is made either possible or easier. The radiosensitive group of bladder carcinomas does not seem to belong to any definite pathological class, and there is no way known at present to differentiate them in advance from the radioresistant group.

As an example of the results obtained, one observer[3] reports twenty-six cases of advanced infiltrating carcinoma of the bladder treated with 800 Kv. x-rays: seven cases (27 per cent) obtained complete or nearly complete regression so that excision or fulguration could be easily done; nine cases (35 per cent) obtained partial regression with relief of symptoms and improved operative conditions; and ten cases (38 per cent) obtained little benefit. Thus approximately 60 per cent were improved so that operation became either possible or more complete, and 40 per cent were unimproved. Heavy doses are necessary for good results, but severe skin reactions are not necessary. Similar results can be obtained with standard 200 Kv. therapy.

### Testicle

Tumors of the testicle, like those of the bladder, are divided into two main groups (with many subdivisions). About 50 per cent are primarily embryonal teratomas or seminomas, and these are radiosensitive, but they usually contain also a mixture of more mature and less sensitive cellular elements. The other half comprises a confused group of predominately adult teratomas or mixed tumors, which are slow growing and radioresistant. There is no means of differentiating them clinically from embryonal teratomas except by the greater rate of growth and increased output of Prolan A by the embryonal teratomas.

These testicular tumors spread through the deep lymphatics to the lymph nodes around the abdominal aorta just below the renal pedicle and behind the peritoneum, thence through the thoracic duct to the subclavian vein and pulmonary circulation. For this reason radiation therapy, to be effective, must include the entire abdomen and mediastinum as well as the primary growth. The results of treatment of these tumors by surgery alone by means of orchidectomy, either simple or radical, have long been disappointing. The quoted results vary from 10 per cent five-year cures given by Ferguson,[5] to 58 per cent five-year cures reported by Cabot and Berkson,[1] and in addition there is about 20 per cent mortality with radical orchidectomy.

In 1934 Ferguson,[5] at Memorial Hospital in New York, reported much improved results from pre-operative high voltage x-ray therapy followed by simple orchidectomy in cases of teratoma testis, and introduced the method of checking the effectiveness of the radiation by means of comparative assays of the urinary content of Prolan A. The amount of Prolan A excreted in the urine was shown to diminish progressively under radiation treatment, and to increase again with the recurrence of metastases. In his latest report in 1938, Ferguson gives 40 per cent five-

year cures for teratoma testis, and urges extensive pre-operative radiation, followed by orchidectomy six to twelve weeks later. Waters[8] reports 50 per cent five-year cures, and Cabot and Berkson[1] raised their five-year percentage to 71 per cent with the use of pre-operative and postoperative radiation.

### Prostate

Carcinoma of the prostate is nearly always a slowly growing and highly radioresistant tumor, so that the results of radiation therapy, whether given by external high voltage x-ray or by radium implantations, are usually unsatisfactory. The use of radiation does not appear to destroy or appreciably slow the spread of metastases. In many cases, however, radiation is of great benefit in relieving the severe pain which often results from local extension or spinal metastases, and it is for this purpose that it can be most justifiably used.

The results obtained from the use of radiation in cases of carcinoma of the prostate are well illustrated by a recent report[2] from the University of Minnesota: of 112 cases treated by radiation alone, 7 per cent were well after twenty-one months (1¾ years). Of sixty-seven cases treated by resection and radiation, 10.5 per cent were well after twenty-nine months (2¼ years). They believe that radiation is desirable regardless of the absolute poor end-results, because of the relief of pain from extension and metastases and the decreased tendency to recurrent obstruction after its surgical relief. Not all observers will agree with this conclusion, and it seems clear that radiation therapy has not proved to be of sufficient value to be used routinely in all cases of carcinoma of the prostate unless the urologist is convinced that its palliative value is sufficiently great.

### Comment

The fact that x-radiation cannot entirely destroy these growths and so effect a cure by itself (except perhaps in the most sensitive tumors, such as Wilms, in which some feel that radiation alone is sufficient without surgery) does not mean at all that it is valueless, but only that it should be used to take the utmost advantage of the devitalization and shrinkage in size which is the usual effect of radiation on these tumors. This obviously means radiation followed by operation at the time of the maximum radiation effect—usually three to six weeks. In other words, we advocate the use of radiation therapy to induce what may be called a quiescent stage in the tumor itself, during which operative removal can be performed with greater mechanical ease and less risk of metastasis.

### Conclusions

1. Radiation therapy with high voltage x-ray should be used as an essential pre-operative procedure in most cases of genito-urinary malignancy, and its proper use will greatly increase the successful operative results in malignant diseases of the kidney, bladder, and testicle.

2. About 90 per cent of kidney tumors, including all forms except pelvic carcinomas, are radiosensitive, and should have the benefit of pre-operative radiation, reserving postoperative treatment for those containing embryonal tissue or those whose removal was incomplete.

3. Most papillomas of the bladder, and 60 per cent of bladder carcinomas, are radiosensitive. Papillomas should have postoperative radiation to prevent recurrence, and carcinomas should have pre-operative radiation to improve the operative results.

4. Testicular tumors, especially teratoma testis, should be treated with pre-operative x-ray therapy followed by simple orchidectomy, and the progress of the treatment should be checked by frequent determinations of the excretory output of Prolan A.

5. Carcinoma of the prostate is generally radioresistant, and radiation therapy is best reserved for palliative relief of pain when necessary.

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# Acute Gangrenous Cholecystitis In Children

## Report of a Case in a Child Aged Four*

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■ In 1734, Mr. Joseph Gibson, Surgeon in Leith and Member of the Surgeon Apothecaries of Edinburgh, reported the first case of gall-bladder disease in a child. His patient was twelve years old and evidently had a ruptured gall bladder with liver abscesses. Since then cases have been reported at intervals but never in sufficient numbers to consider this condition as common. In a report in 1928, 226 cases were collected from the literature and four of that author's personal cases were added. By 1938, slightly over 300 cases had been reported. These were under 15 years of age and most were of a chronic nature. Cases, as a rule, are reported by surgeons as accidental findings at time of operation.

This should remind us that gall-bladder disease, even though it be in children, should be included in a differential diagnosis of abdominal lesions. Although clinical and post mortem records tend to show that this condition is quite rare, it is probable that gall-bladder disease in children is being overlooked. Acute cases must be included in the diagnosis, and ruled out completely, before being cast aside as too rare to occur.

A recent case on the Surgical Service of Drs. Brooks and Ashley in Harper Hospital is reported in detail.

### Case Report

R. M., a four-year-old male, born May 20, 1936, was admitted to Harper Hospital at 11:22 P. M. on June 25, 1939. The history was elicited that he awoke on June 22, 1939, complaining of abdominal pain. He drank some milk but refused other food. He vomited twice that day; the vomitus consisting of ingested food. The pain was more severe that night. On the next day (June 23, 1939) the patient felt better and complained very little. The following day (June 24, 1939) he again complained of severe abdominal pain and was given laxatives. He vomited twice including most of the medicine. He was nauseated and refused fluids. On June 25, the pain was more severe and an enema was given without any relief of symptoms. The patient was then admitted to the hospital late that night.

The patient's birth and developmental history were normal during the first year. Following this period the family was disappointed in his inability to gain regularly and were concerned about his poor appetite. He had not had any important illnesses except for a "mild cold" at the onset of his disease.

Examination revealed a fairly well-developed, fairly well-nourished male child of four years in acute distress. The throat was slightly injected. The tongue was moist. There were small glands in both cervical chains. There was a suggestion of icterus to the scleræ. The heart and lungs were negative. Pressure over the entire abdomen caused the patient pain. Pressure over the right side of the abdomen semed to cause more pain than pressure over the left side. No masses were made out. The extremities were negative. A complete and satisfactory examination of the abdomen was not possible because of the irritability of the patient.

The temperature was 100.4, pulse 144, respirations 20. There were 7,400 leukocytes with 62 per cent polymorphonuclear cells. Urinalysis was negative.

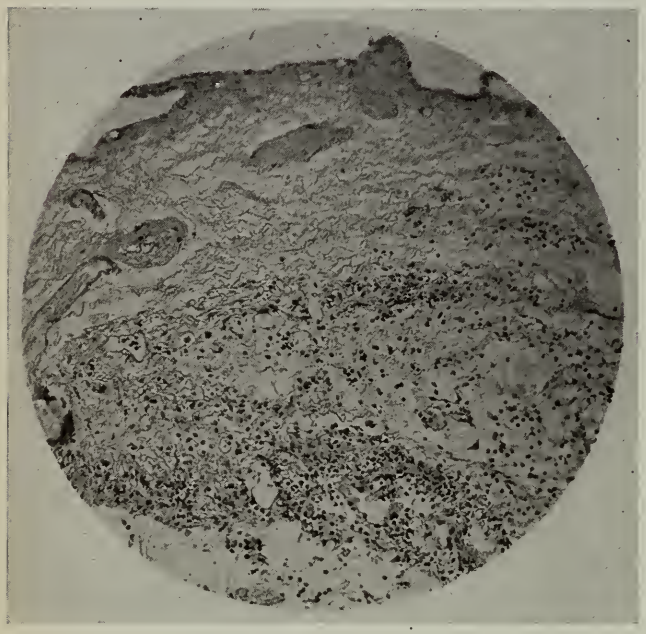
A diagnosis of acute surgical abdomen was made and the finding of an acute appendix was expected. Operation was begun at 12:15 A. M., on June 26, 1939, under nitrous oxide-oxygen-ether anesthesia. The operative dictation reads:

*Operation.*—A 1½ inch right pararectus incision was made through a thin but fairly well developed abdominal wall retracting the muscle medially. On opening the peritoneal cavity there was a sudden gush of odorless dark brownish-yellow fluid which appeared to be bile stained. After exploration was carried out for a few minutes and the cecum could not be located the incision was enlarged to 3½ inches. The cecum, terminal ileum, and appendix were normal. There were no mesenteric glands. There was no evidence of a Meckel's diverticulum. On the omentum in the region of the liver was a 5 centimeter exudative area. In contact with this was a large, tense, gangrenous gall bladder. The liver appeared normal with sharp edges. The gall bladder was aspirated, cultured and a piece removed for microscopic diagnosis. No stones were found. Cholecystostomy was done, using two purse string sutures; the first including the wall of the tube. One soft drain was placed in Morison's pouch. The abdomen was closed in layers using cat-gut and reinforced with two waxed silk retention sutures.

The operation took thirty minutes and at the completion of the procedure the child was awake and in

*From the Surgical Service of Harper Hospital, Detroit, Michigan.

fair condition. His temperature went to 102° a few hours later and in twenty-four hours it was 100° with a pulse of 110. Bile began draining at once and the child had an uneventful postoperative course. On the eighth postoperative day the soft drain was removed. On the thirteenth postoperative day the cholecystostomy tube came out. The retention sutures were then removed and the child discharged the following day.



*Pathologic Examination.*—The culture of the gall bladder failed to produce a growth. The pathologic report by Dr. P. F. Morse, pathologist at Harper Hospital, is presented with a photomicograph.

Gross: A 1 centimeter piece of gall-bladder wall.

Microscopic: The cellular structure of the mucosa is destroyed and replaced by necrotic tissue shreds. The gall-bladder wall is edematous and intensely infiltrated with round cells. The structure of the gall-bladder wall can still be made out in the course of the connective tissue fibers and blood vessels, but is torn apart by exudate and islands of necrosis.

Diagnosis: Acute Gangrenous Cholecystitis.

At the present writing, about one year later, the child is quite well except that his parents still feel he is not gaining weight as rapidly as he should. He has not seen his physician for some time.

*Occurrence.*—In 3,000 operations performed on the biliary tract by the surgical services in Harper Hospital for twelve years ending in 1940, the rarity of gall-bladder disease in children is startling. One case operated at three months was a cholecystostomy as an emergency procedure for bile drainage in suspected congenital duct atresia. It terminated fatally. Post mortem examination was not obtained. One case of a four-year-old is here reported. There were two cases in children of nine years. One case was a child thirteen years old and one case fourteen years old.

In the large group of cholecystographic studies made in Harper Hospital the rarity of a study in a child leads one to conclude that most physicians believe this is an impossibe procedure. Children do tolerate the dye well. Parenteral administration can be resorted to if necessary. Improved technique and equipment add to the feasibility of doing studies in children.

**As a rule during appendectomy in a child when a fairly innocent looking appendix is found, the surgeon explores the abdomen for mesenteric glands, Meckel's diverticulum, and congenital bands about the terminal ileum. A diseased gall bladder is easily overlooked because the incision is inadequate to admit two fingers for exploration and rather than enlarge the incision the operator dismisses gall-bladder disease as a rare entity. If this is the case, the symptoms which brought the patient to the physician originally would persist.**

## Conclusion

1. Gall-bladder disease in children is a definite entity and probably not very rare.
2. Many cases of gall-bladder disease go undiscovered because a clinical diagnosis is not made.
3. Cholecystographic studies should be made more frequently in children.
4. Surgical exploration of the biliary tract is not done often enough during the removal of a so-called "interval appendix."
5. A case of non-calculus gangrenous cholecystitis in a four-year-old child is reported.

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# Amebiasis with Pleuro-Pulmonary Complications

## Report of Two Cases*

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■ The relative infrequency of pleuro-pulmonary complications in amebiasis and the failure to diagnose such cases during life warrants the report of these cases.

### Case Reports

*Case 1.*—A white man, aged thirty-five, was admitted July 2, 1938, complaining of blood spitting, pain in the right chest, cough and abundant sputum. On February 1, 1938, he had a severe pain in the right lower chest, pleuritic in type, accompanied by chills and fever. During the next six weeks he was bedfast. X-ray studies of the chest made in March were negative. General impairment of health continued. On May 1, three months after the initial symptoms, he had a small pulmonary hemorrhage. During the next two months he continued to spit 100 to 200 c.c. of hemorrhagic bitter tasting sputum. The pain in the right chest was frequently referred to the right shoulder. When admitted he was weak, dyspneic on exertion, hemorrhages were profuse and there was complete loss of appetite. Diarrhea did not occur at any time.

The positive physical findings were marked diminution of resonance, breath sounds, whispered voice, and tactile fremitus in the lower half of the right lung. There was moderate muscle spasm and tenderness in the right upper quadrant of the abdomen.

The admission laboratory studies showed a mild leukocytosis. Sedimentation rate (Westergren) 103 mm. Blood Kahn negative. Four direct smears and a culture of the sputum were negative for B. tuberculosis. Stereo films of the chest showed a dense homogeneous shadow obscuring the lower quarter of the right lung. Bucky and lateral films localized the density in the posterior half of the lung field. The right diaphragm was elevated four centimeters higher than the left.

The initial studies failed to establish a definite diagnosis. No acid-fast organisms were demonstrated in the studies of the sputum. A diagnostic right pneumothorax was induced. There was no empyema. Additional films suggested an extensive lung abscess. Lipiodol occupied only the anterior half of the middle lobe. The posterior half was free of oil. Three bronchoscopic examinations were made. There was no evidence of neoplasm or foreign body. Our consulting pathologist suggested we might be dealing with a liver abscess. A diagnostic pneumoperitoneum was induced. Roentgenograms showed the right lobe of the liver to be firmly adherent to the diaphragm. The stools were then examined and amebæ were demonstrated on two occasions. Emetine and stovarsol therapy was begun at once.

During the period between admission and the date when the diagnosis was established the patient's condition had grown progressively worse. He raised large quantities of hemorrhagic sputum. He continued to lose weight, his appetite was extremely poor, fatigue and malaise were marked. He slept very little and was very despondent. Pain in the right lower chest and right shoulder appeared frequently. His temperature ranged from 98 to 103.8. There was a moderately severe secondary anemia.

He was given alternating courses of emetine and stovarsol. Within thirty-six hours after emetine therapy was begun, his temperature became normal and remained normal. The sputum decreased markedly during the first four days and completely disappeared at the end of two weeks. Within a few days his appetite became ravenous, in contrast to the former extreme anorexia. He gained twenty-five pounds within a month. There were no toxic reactions from either drug. Eight stool examinations and frequent sputum examinations were negative for amebæ. The sedimentation rate was 19, in contrast to 103 on admission. The leukocyte count returned to normal. He was discharged September 16, 1938, as apparently cured and has remained well. Serial roentgenograms showed complete resolution.

*Case 2.*—A white man, aged fifty-four, was admitted September 16, 1938, complaining of severe cough, sputum, and pain in the right upper chest. In July, 1936, he developed severe diarrhea and the diagnosis of amebic dysentery was established the following October. A course of emetine therapy was followed by disappearance of all symptoms. He remained well until October, 1937, when cough, sputum, fever and loss of weight occurred. In January, 1938, he had pain in the right upper quadrant of the abdomen. A presumptive diagnosis of liver abscess was made and a second course of emetine was given. He responded immediately and remained well until July, 1938, when a relapse occurred. Severe cough and sputum, pleuritic-like pain below the right clavicle, night sweats and fever were present. During the next two months extensive, all-inclusive diagnostic studies were carried out at one of our large national clinics. They concluded there was no relapse of the amebiasis, but tubercle bacilli were found in the sputum and although the chest films were clear, they advised sanatorium care.

*From the Oakland County Tuberculosis Sanatorium.

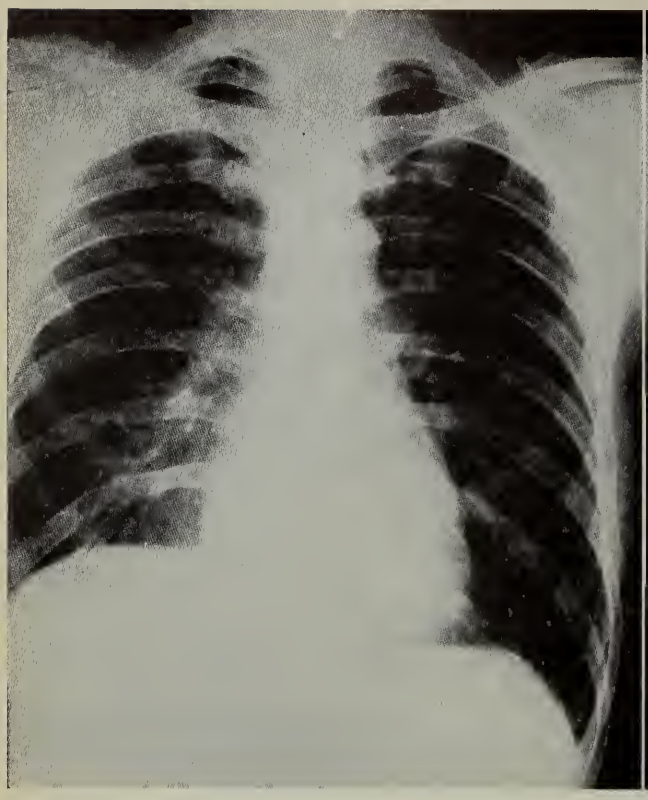

Fig. 1. Case 1. March 17, 1938. Right diaphragm elevated full interspace higher than left.

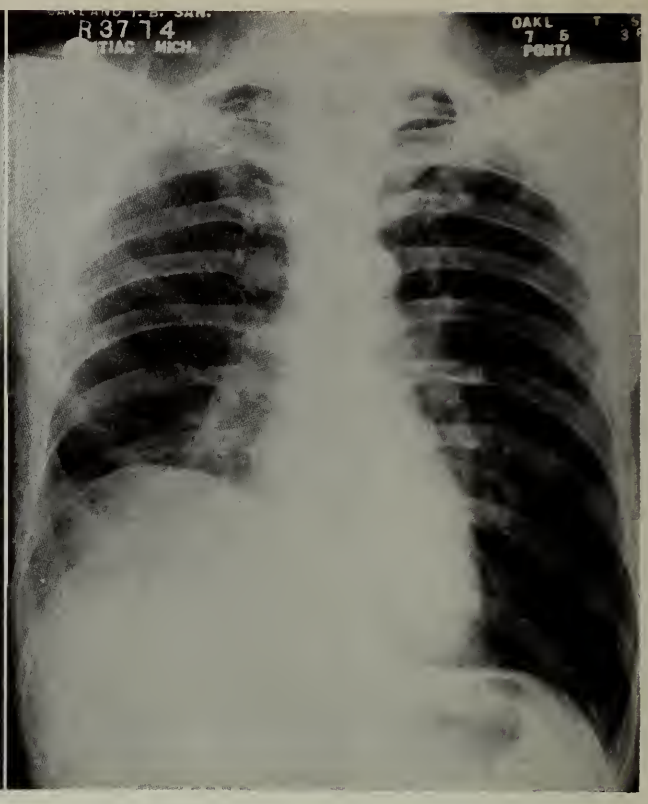


Fig. 2. Case 1. July 5, 1938. Dense homogeneous shadow obscures the lower one-quarter of the right lung field.

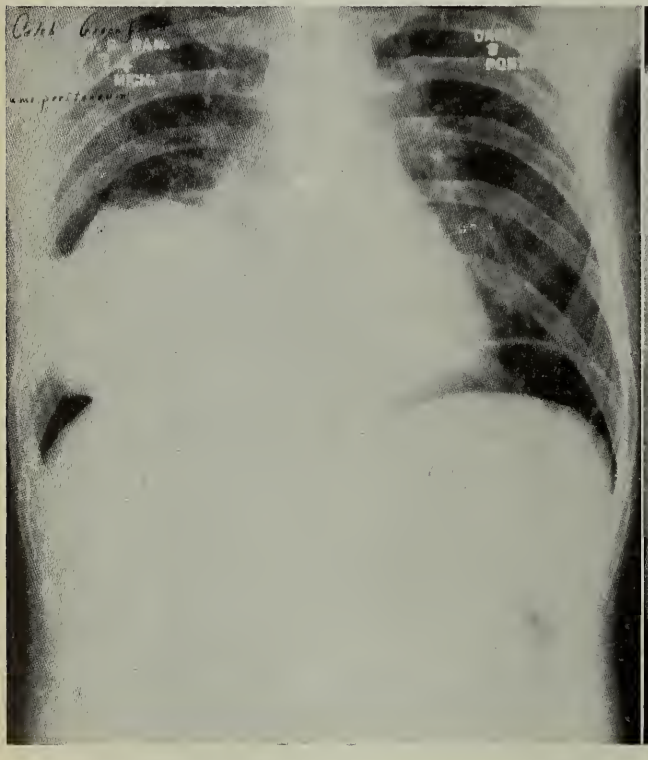

Fig. 3. Case 1. August 2, 1938. Pneumoperitoneum present. Right lobe of liver widely adherent to diaphragm. Dense homogeneous mass involves right lower lung field.

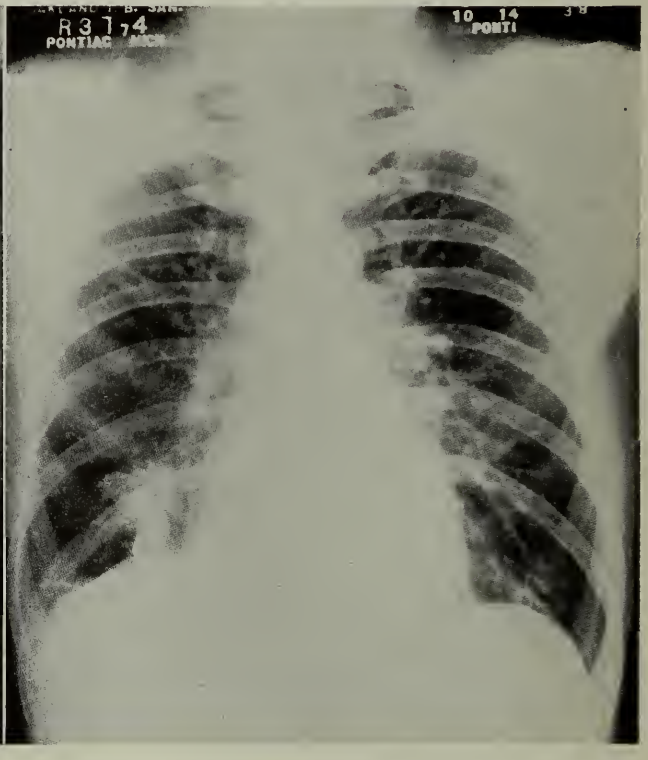


Fig. 4. Case 1. October 14, 1938. Complete clearing of former density at right base except for opacity due to retained lipiodol.

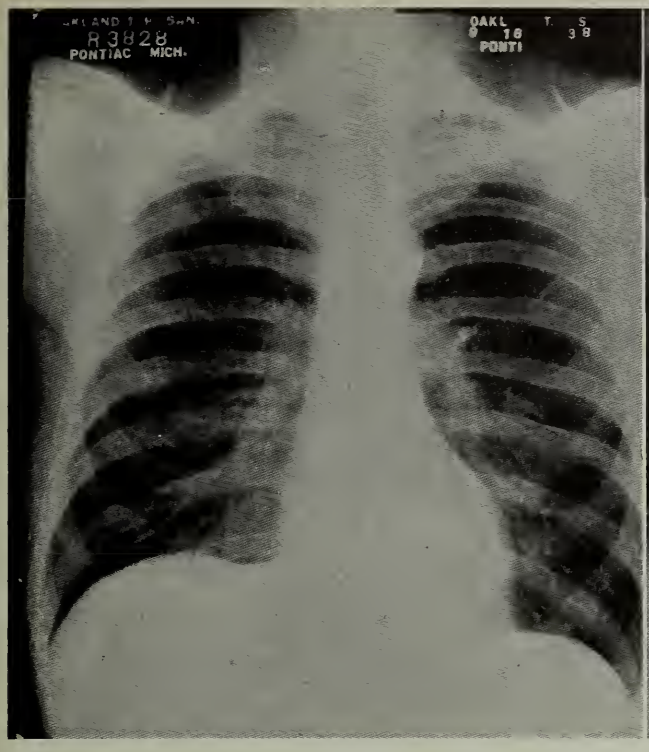


Fig. 5. Case 2. September 16, 1938. Both lung fields clear. Slight elevation of right diaphragm.

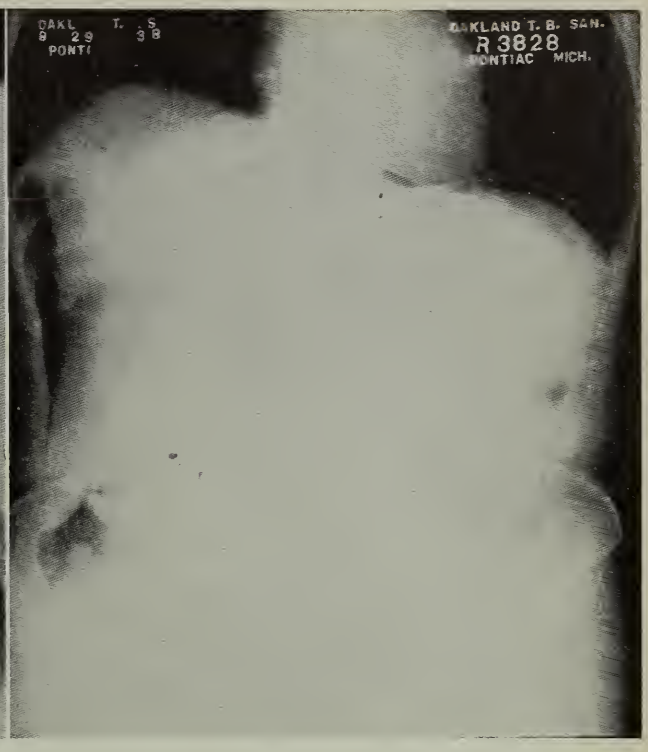


Fig. 6. Case 2. September 29, 1938. Pneumoperitoneum. Right lobe of liver widely adherent to diaphragm. Marked enlargement of liver and elevation of right diaphragm.

The physical examination, aside from evidence of weight loss, was within normal limits. The chest roentgenograms were clear. Direct smears, concentrates and cultures of the sputum were negative for tubercle bacilli. Bronchoscopic and lipiodol studies were negative. Three stool examinations were negative for amebæ. The sedimentation rate (Westergren) was 105 mm. The blood Kahn was negative. A pneumoperitoneum showed the liver to be widely adherent to the right diaphragm and the flat film of the abdomen suggested an enlarged liver. The icteric index was 3 and 8 on two occasions. There was a moderately severe secondary anemia and a moderate leukocytosis.

A diagnosis of amebic abscess of the liver was made. During the two months prior to admission he had received continuous specific therapy to the point of toxicity. It was felt that further administration of emetine was contraindicated for the time being. During the next six weeks he improved clinically, but the fever ranging from 99 to 103.6 persisted. In November emetine was again given, alternating with stovarsol. Within thirty-six hours his temperature was normal and remained so for twelve days. Three courses were given. The last course failed to bring about any change. Daily fever persisted. Roentgenograms of the chest one month after admission showed the right diaphragm to be elevated two interspaces. Toward the end of the third month he complained of palpitation and dyspnea at rest. Examination revealed auricular fibrillation, confirmed by electrocardiogram. There was no edema. He was digitalized. Surgical intervention was advised, but he returned home January 13, 1939. His condition grew worse. During the first week in March, 1939, he became critically ill and was admitted to a large general hospital in Detroit, where he died March 11, 1939. An autopsy was performed. The pertinent findings are given here.

The liver margin extended 15 cm. below the coastal margin. The right dome of the diaphragm reached the level of the third intercostal space. The heart was normal. The right lung weighed 920 gms. The right lower lobe was large, consolidated and airless. The cut surface was granular and microscopically the picture was that of a lobar pneumonia. There was no gross or microscopic evidence of tuberculosis. The liver weighed 5,200 gms. and was enormously enlarged by a bulging mass occupying the entire right lobe. A quantity of thick creamy, gelatinous matter was aspirated from this large solitary abscess which measured 20 cm. in diameter. After removal of the cyst the liver weighed 2,720 gms. Sections from the abscess wall showed amebæ. No ulceration of the gastrointestinal tract was found and no amebæ seen in sections of the large bowel.

## Comment

Amebiasis is a widespread and common disease. Liver abscess is the most common complication of the disease, but it is less generally appreciated that pleuro-pulmonary complications are frequently present but often not recognized

during life. Thirteen per cent of cases of amebiasis develop pleuro-pulmonary complications.

**There is no other known type of abscess of the lung that responds at once so dramatically to specific therapy as does amebic abscess. If the diagnosis is suspected and the amebæ are not found, a therapeutic trial of emetine and stovarsol will bring about an astounding improvement if amebiasis is present.**

Not all cases of amebiasis with liver abscess are cured by specific therapy. The usual initial response to treatment may be obtained, but may be followed by relapse in spite of adequate treatment. This is illustrated by our second case, in which an unusually large solitary amebic liver abscess was found at autopsy. It is evident that surgical drainage should have been done when the early response was followed by relapse.

Amebiasis should be considered in the differential diagnosis in every lung abscess of the lower half of the right lung. If there is no clear history suggesting amebiasis, diagnostic studies should include the induction of pneumoperitoneum. This procedure gives reliable evidence of any attachment between the right lobe of the liver and the right hemidiaphragm, as well as the actual size of the liver. Amebic abscess of the liver is practically always located in the right lobe. If this evidence is suggestive, specific therapy is justified and indicated. Our first case illustrates the dramatic response to treatment. A tentative diagnosis of pulmonary tuberculosis had been made in both cases before admission to the sanatorium.

### Conclusions

1. Two cases of amebic liver abscess with pleuro-pulmonary symptoms and complications are presented.
2. One case of lung abscess due to amebiasis is discussed.
3. The difficulties in the diagnosis are outlined.
4. Treatment with emetine and stovarsol frequently results in a dramatic cure, as in the first case discussed.
5. A case of large solitary amebic liver abscess without evident pulmonary disease but characterized by distressing cough, sputum and dyspnea is presented.
6. When emetine and stovarsol and related drugs fail in a known case of amebiasis, the possibility of a large solitary abscess must be considered and surgical drainage undertaken.

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# Vitamin and Mineral Requirements in Pregnancy*


**By J. H. Musser, M.D. and W. A. Sodeman, M.D.**
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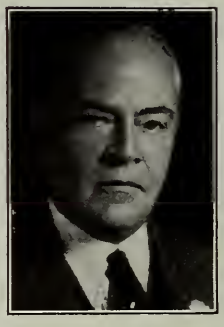


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■ AN adequate diet is one which contains a sufficient quantity of the factors necessary for proper growth, maturation, reproduction, and maintenance of good health. The very definition of an adequate diet, therefore, takes into consideration the state of pregnancy and associates intimately the possibility of deficiency disease with pregnancy.

The inability of a patient to satisfy her bodily nutritional needs may arise in many ways, but for clinical purposes, such patients may be placed in one of three categories. The first includes those ingesting inadequate quantities of one or more of the essential dietary factors. This may arise from many causes; for example, economic difficulties, faddism in diet, psychic states, dys-


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pepsia, and anorexia due to disease. The second comprises those ingesting these factors in amounts which are usually adequate, but with the presence of some disease within the body which interferes with their proper utilization. The development of pellagra in chronic amebiasis and of hemorrhage in obstructive jaundice are examples of such states. The third comprises those receiving an inadequate intake of the essential dietary factors because of acutely or suddenly changed requirements. While this group is really a subdivision of the first above, clinically it is well to consider it as a separate division, for the usual normal diet may be taken, but the bodily requirements have changed.

**A person may have ingested and utilized a diet which, for long periods of time, has been adequate, at least to prevent the development of symptoms. Then, some new state, such as hyperthyroidism, tuberculosis, or pregnancy, may appear and increase the need for certain dietary factors without sufficiently increasing, or at times actually decreasing, the appetite and desire for food. The individual may continue to ingest the diet previously taken and previously adequate, a diet which for the new state is no longer adequate and symptoms and evidences of subnutrition may arise.**

In pregnancy the patient may fall into any one or all three of these categories either from incidental conditions or those directly related to the pregnancy itself. The dangers of the third group are always present, and those of the first and second frequently develop. Increased requirements without increased desire to raise the intake of food is operative to some extent in all pregnancies whether normal or abnormal. Pregnancy itself may, for reasons not always clear, change the patient's desire for food, or cause the development of unusual dislikes and cravings, which may eventuate in an inadequate diet. Toxemic states may do the same thing. Inadequate utilization of an adequate diet again may arise not only from incidental causes but directly from the pregnancy; toxemia and vomiting of pregnancy, for example.

**It is clear that in all pregnancies the physician must be on the alert for dietary deficiency. A careful dietary regimen must be carried out by the pregnant woman in order to prevent the occurrence of deficiency disease.**

The specific dietary needs of the body are not entirely known, but in general the known requirements may be listed as follows: (1) calories, (2) protein, (3) water, (4) minerals, (5) vitamins. Palatability, satiety value, proper residue, and digestibility are also important. All of these groups require consideration in the diet of the pregnant woman.

### Caloric Needs

Caloric needs are supplied by carbohydrates, fats, and to some extent by proteins. In adults these requirements are usually judged by the physician and patient by the body weight. The dietary is adjusted to bring the patient's weight to optimum levels, and when so adjusted intake is maintained at a level necessary to maintain the weight. In pregnancy, however, there is a physiologic gain in weight, and caloric intake must be increased to take care of this increased requirement. With a tendency toward obesity and with advice to "eat plenty," including milk and other high calorie food, the patient may gain weight excessively, and only too frequently a gain in weight persists after delivery. The cause for such persistence is not clear and may lie in changed endocrine relationships, but it is only too true that many women increase in weight with each succeeding pregnancy.

One may ask what the normal weight gain in pregnancy is, in order that the woman may adjust her caloric intake on the basis of weight gain. Dieckmann and Brown[6] have found the average weight increase in pregnancy to be 9.7 kg. (21 pounds) with a standard deviation of 4.3. In treating a woman whose weight is optimum at conception, Dieckmann and Swanson[7] restrict total weight gain to 7.5 kg. (16.5 pounds), which is equivalent to the weight of the fetus, placenta, amniotic fluid, and the maternal physiologic changes. Weight increases little in the first trimester when growth of the fetus is small. As pregnancy progresses to the second and third trimesters, increased demands of the fetus are apparent. This is reflected in many ways, such as the rise in the basal metabolic rate[9] which progressively increases through these two periods. In the last trimester the fetus practically triples in weight. In the second tri-

mester definite weight gains appear, approximately 0.5 pound per week, to increase to 2 or more pounds per week in the third trimester. As labor approaches, there is generally a loss in weight. From the second trimester on, particularly at the fourth to fifth month, the diet must be increased and carefully balanced to take care of the caloric needs as well as the increased protein, vitamin, and mineral requirements. In the underweight patient, weight gains exceeding those stated above are desired, the amount exceeding 20 pounds depending to some extent upon the degree of subnutrition.

No discussion will be given here concerning the use of carbohydrates as the basis for certain patterns of treatment in vomiting and toxemia of pregnancy.

Although the basal metabolism returns to normal levels following delivery, the caloric demands of the mother continue at a high level, even somewhat higher than in pregnancy itself, because of the production of milk. In the human, the caloric value of milk approximates 700 calories per 1,000 cc. In addition, an adequate intake of other nutritional elements entering milk must be supplied. These will be mentioned below. Likewise, certain nutritional factors are deemed necessary to stimulate an adequate production of milk, particularly fats, protein, vitamin B, and adequate fluids up to certain limits.

### Proteins

Proteins supply the nitrogenous products, amino acids, essential to the structure of cells. They are important in water balance as well. In pregnancy adequate protein intake is thought also to increase milk production and prevent the development of certain anemias. Inadequate protein intake in pregnancy has been suggested by the group at Ann Arbor as the cause of mild, and possibly also severe, macrocytic anemia in pregnancy.[1] Excluding pregnancy, protein requirements are usually given as ⅔ to 1 gm. per kilogram body weight per day. The value varies with the quality of the protein, that of animal source, gelatin excepted, usually supplying the essential amino acids with greater abundance than that of vegetable origin. A large group of individuals of average means in this country ingests up to 100 gm. of protein daily, a more than adequate supply. But a large group of individuals of limited means receives an inadequate or borderline intake of proteins. Inexpensive diets are essentially carbohydrate diets, and the restriction of lean meats, fowl, fish, eggs, and milk in the diet leads to protein inadequacy. In pregnancy such patients face an added shortage, for fetal and uterine growth, as well as other changes in the maternal organism, increase the nitrogen requirements, and increase, therefore, the daily protein requirements. There are estimates that 2,200 to 2,800 gm. of protein are stored in pregnancy. One finds estimates of daily needs ranging from 70 to 119 gm. In comparison with the usual requirement of ⅔ to 1 gm. per kilogram body weight for the average individual, the pregnant woman would need 1.5 up to possibly 2 gm. from the fifth month on. In the period of lactation a high protein intake is considered of particular importance not only because of protein needs in milk, but to stimulate milk production.

Manipulation of the protein intake in control of toxemias of pregnancy is merely mentioned here to emphasize the fact that protein restriction and feeding play a part in the pathologic as well as in the physiologic needs of pregnancy.

### Water

Changes in water balance occur physiologically in pregnancy. The hydremia, resulting in reduced hemoglobin and erythrocyte values, is well known. However, adequate supplies of water are usually of little concern in physiologic states because of free access to it. The same is true of pregnancy unaccompanied by pathologic conditions. The pregnant woman is usually admonished, however, to drink plenty of water, particularly in the later stages of pregnancy, for water intake at that time is thought to be important in the quantity of milk supplied in lactation.

### Minerals

Mineral substances perform bodily functions essential to life and to proper nutrition. Many of the minerals necessary in small amounts are widely distributed in nature and occur in sufficient abundance to make them of little clinical importance except in rare instances. This is true of copper, zinc, aluminum, magnesium, cobalt, and nickel. Others, however, such as calcium, phosphorus, iron, and iodine, are often required in quantities which exceed the supply and

become of extreme clinical importance. This is particularly true in pregnancy where requirements are increased, for the fetus must obtain all its mineral needs from the mother.

*Calcium and Phosphorus.*—Clinical examples indicate only too clearly that the fetus exerts its demands upon the mother for calcium and phosphorus even in the face of marked deficiency in the mother. Adequate maternal supplies[5] produce highest grades of fetal bone calcification. Deficient calcium supplies in the diet, together with deficient maternal stores, lead not only to demineralization of the maternal bones with osteomalacia[13] but may eventuate in fetal rickets. Outside pregnancy, the daily calcium and phosphorus requirements are usually given as 1 to 1.5 gm. and 0.9 gm., respectively. In pregnancy, the respective estimates are 1.3 to 1.8 and 1.4 to 2.0 gm. These requirements are felt in the latter half of pregnancy. The newborn contains 24 to 30 gm. of calcium and 14 gm. of phosphorus, over half of which is deposited in the last two months.[9] Any remarks concerning calcium and phosphorus requirements postulate an adequate source of vitamin D (q. vide).

The best dietary sources of calcium and phosphorus are milk and milk products. A quart of milk contains 1.2 gm. of calcium and 0.9 gm. of phosphorus. Phosphorus sources are adequate in most dietaries in this country. Important sources other than milk include beans, egg yolk, cheese, whole wheat, beef, oatmeal, nuts, and prunes. Calcium sources are often deficient, however. Aside from milk, other foods high in calcium include egg yolk, molasses, clams, certain greens, such as dandelion and turnip tops, figs, filberts, and almonds. Green vegetables contain fair amounts, but much of their calcium is not in utilizable form because of the presence of oxalates. Milk and milk products stand out, therefore, as the chief dietary sources, and at least a quart per day should be included in the dietary of the pregnant woman, even if calcium salts are added. The latter, if used, should be given in large dosage before meals or with dilute hydrochloric acid.

**During the period of lactation at least one quart of milk, and preferably a quart and a half, should be ingested daily along with a diet adequate from other standpoints to insure a supply of calcium and other minerals. Even under these circumstances, without cod liver oil, positive calcium balance may be impossible.**

*Iron.*—The daily iron requirement for the average adult is usually placed at 15 mg. This same figure has been given for pregnant women,[4] but others have found higher values necessary.[11] The fetus draws upon the mother for the necessary iron for hemoglobin production and requires, it is estimated,[1,8] 250 to 500 mg., most of which is taken into the fetus in the last trimester. Since the fetus takes its requirement for blood formation despite a deficiency in the mother, the mother will become anemic and the child will be born with normal red blood cell and hemoglobin values for the newborn. However, the child may not, under those circumstances, store the supply of iron needed for the first year of life and may develop anemia before the end of the first year. With inadequate maternal supply of iron, one may see that fetal demands hasten the development of iron deficiency anemia in the mother, and repeated pregnancies, particularly, may be important in the development of anemia.

When allowance is made for the hydremia of pregnancy, already discussed, anemia, particularly of the hypochromic variety, is very common. Although it occurs frequently in all economic groups, indicating the existence of causative factors other than dietary intake, it definitely varies with the economic status. One of the factors operative in all economic groups is the reduction in gastric acidity in many patients, which, it is thought, interferes with the proper absorption of iron.

The well-rounded diet, particularly with lean meat, parenchymatous organs, such as liver and kidney, eggs, and leafy vegetables, supplies adequate iron without the necessity of added iron salts. Other foods rich in iron include dates, figs, prunes, oatmeal, raisins, molasses, legumes, and other fruits, particularly apricots, prunes, and peaches. Doubtful intake of iron-containing foods is an indication for blood check-ups, which should be done routinely on several occasions during pregnancy in any event. Where correction of the diet cannot be relied upon, and where hypochromic anemia develops as a result of defective absorption in spite of apparently adequate intake, addition of iron salts is indicated.

*Iodine.*—In areas in which iodine deficiency in the ground water exists, the use of the usual measures for prophylaxis current in those areas, such as the use of iodized salt, suffices in pregnancy and may be necessary to prevent the occurrence of goiter in the newborn.

### Vitamins

The vitamins of known clinical importance are vitamins A, $B_1$, certain fractions of the $B_2$ complex, C, D, possibly E, and K. All of these have clinical aspects of direct importance in pregnancy. Increased requirements are known for all in which sufficiently accurate estimates of needs have been made.

**In the first half of pregnancy, little concern need be given the requirements above those usually necessary. However, in the latter half of pregnancy, requirements are greatly elevated and this increased need is carried into the lactation period, as will be indicated below.**

*Vitamin A.*—Vitamin A is essential for proper growth, proper vision, and the maintenance of healthy epithelial structures. In experimental animals, changes in the urogenital epithelium have led to difficult labor in the female and to degeneration of the testes in the male. Premature labor, stillbirth at term, deficient milk supply in the mother, diarrhea in the newborn, and death of the young, have also been observed in animals. In contrast to such marked deficiency produced experimentally, humans show generally moderate deficiency and the effects on human reproduction of such grades of deficiency as seen clinically are not known. Equivocal results have been reported in the treatment of human sterility with vitamin A.[3]

The daily requirement of vitamin A for adults is probably around 3,000 to 4,000 I. U. These amounts are doubled for children and pregnant women. The League of Nations Commission recommends 8,700 to 9,000 I. U. for pregnant women. Many estimates of the daily requirement have been made on the basis of the dark adaptation test, which is not universally accepted as a satisfactory method for such measurements.

**Since the average diet is often not satisfactory for ordinary needs, it is evident that the doubled requirement in the latter half of pregnancy is not likely to be met by this means. Special efforts must be made to include in the diet foods high in vitamin A, such as greens, sweet potatoes, cream, cheese, egg yolk, carrots, corn, squash, liver, apricots, and peaches. Rancid fats destroy vitamin A and the precursor, carotene. Their importance in food storage is unknown, but vegetables are best cooked rapidly without fat meat. Supplements are desirable. Fish liver oils are commonly used and supply vitamin D as well. Carotene concentrates may be used. The presence of chronic infections, such as tuberculosis, or liver disease, and chronic diarrhea, increases the need for such concentrates.**

In circumstances in which vitamin A deficiency is likely, and pregnancy certainly is one, care must be used in the administration of mineral oil. As shown at Ann Arbor, mineral oil interferes with absorption of carotene even when given in doses as small as 20 c.c. twice daily before meals, but, when necessary, may be given safely as a single dose at bedtime or when vitamin A is used as a source of the vitamin.

It has been pointed out[14] that marked vitamin A deficiency in pregnancy may simulate toxemia and that treatment with vitamin A produces dramatic results.

The increased vitamin A requirements do not stop with delivery. The mother's milk contains considerable quantities of vitamin A which, of course, must be added to the usual amounts necessary for the mother's normal bodily functions at that time. The vitamin A content of mother's milk has been shown to vary with the mother's intake, but is without relationship to the fat content. The average vitamin A content has been found to be 300 I. U. per 100 c.c., which for 800 c.c. per day, would total 2,400 I.U. The need for a continued large supply for the mother in the period of lactation is evident.

*Vitamin $B_1$.*—Here again, the daily requirement of this vitamin is markedly affected by pregnancy. The League of Nations Committee recommends 10 I. U. per 100 calories for adults, increased to 20 to 30 I. U. in pregnancy. Other estimates include 1 mg. (333 I. U.) for each 3,700 non-fat calories. Clinical evaluations of the American diet indicate that many people live on diets borderline in vitamin $B_1$ adequacy. Since pregnancy increases the requirement, and may

at times predispose to a reduced intake, one can see that vitamin $B_1$ deficiency is not unlikely in pregnancy, and so-called gestational polyneuritis is considered by some to be almost exclusively an expression of $B_1$ deficiency. One often thinks of beriberi as a rare or unusual disease, but if there is included in the syndrome those patients in whom the diagnosis is masked by such terms as gestational, diabetic, alcoholic, or metabolic neuritis, and the polyneuritic manifestations of sprue, celiac disease and pellagra, one sees that beriberi is not infrequent.

**One should not wait for gestational polyneuritis, however, to suspect vitamin $B_1$ deficiency in pregnancy. The dietary history may be helpful and, as with many of the other vitamins of clinical importance, there are vague symptoms and signs which occur in lesser degrees of deficiency. Mild deficiency is by far the most frequent, although usually not characteristic enough to lead to a diagnosis on the basis of symptoms alone. These symptoms, which include burning paresthesias of the feet, heaviness and tenderness of the extremities, ease of fatigue, pains, reflex changes, anorexia, dyspepsia, and constipation, may lead to erroneous diagnoses, such as neurasthenia, and with the variety of vague complaints to which the pregnant woman is heir, may be lightly dismissed as "natural" or "to be expected in pregnancy."**

The other vitamin deficiencies in their earlier stages also produce non-specific features, and we want to emphasize a consideration of these symptoms in the light of malnutrition, for it is only by considering the possibility of malnutrition that their nature may be recognized and proper treatment instituted.

With increased requirements of vitamin $B_1$, treatment of mild deficiency, or its prevention, consists of the elimination of vitamin poor foods, such as crackers, pastries, candy, syrup, and rice, from the diet, and the addition of thiamin rich foods, such as seeds, lean pork, milk, liver and other internal organs. Cooking methods destroy some vitamin $B_1$. Where doubt arises as to an adequate intake of vitamin $B_1$, supplements of brewers' yeast or aqueous liver extract may be given as well as the purified vitamin.

Again, lactation maintains the requirement of vitamin $B_1$ at high levels. In rats, requirements as high as five times usual maintenance doses have been found necessary in the nursing mother. The vitamin $B_1$ content of mother's milk is in the large part responsible. The vitamin $B_1$ content of human mother's milk varies with the intake through certain ranges, and study[12] shows that levels above 25 gamma per 100 gm. are not obtained by excessive dietary feeding.

*Other Vitamin B Elements.—Riboflavin* and *nicotinic acid* are of known clinical importance. Aspects of riboflavin deficiency related to human pregnancy have not been worked out to the authors' knowledge. One would assume that the requirement is probably elevated, but the requirement outside pregnancy has not been settled as yet. Nicotinic acid deficiency results in pellagra. Although the Thompson-McFadden Pellagra Commission found in a study in Spartanburg County, South Carolina, that the onset of pellagra was relatively less frequent during pregnancy than at other times, in the early months following delivery the incidence was excessive. Records of others indicate that pellagra has been precipitated by pregnancy and an increased requirement of nicotinic acid is likely, although details are not known. While the treatment of pellagra is commonly carried out with nicotinic acid, the possibility of the presence of multiple deficiency demands an adequate diet from all standpoints, concentrates rich in all factors of the B complex, such as liver, liver extracts and brewers' yeast; and foods rich in the B complex.

Pernicious vomiting of pregnancy is said to have been successfully treated with preparations of the entire B complex.

*Vitamin C.*—Vitamin C, or ascorbic acid, is necessary for certain tissue respiratory functions, and for the proper formation and maintenance of intercellular substances, which accounts for the hemorrhage and bone changes in deficiency. Some have suggested that vitamin C deficiency interferes with normal conception and acts as a contributory cause of spontaneous abortion. The daily requirement for normal adults is not known. Estimates vary from 10 to 100 mg. daily, averaging about 50 mg. (1,000 I. U.). It is raised in conditions with elevated metabolism, such as hyperthyroidism, pregnancy, lactation, and infectious diseases, as well as in gastroin-

testinal disease. In pregnancy estimates of daily needs vary from 75 to 100 mg.

**Such symptoms as mental sluggishness, weakness, gingivitis, ease of fatigue, muscle and joint aches, anorexia, and anemia, are more common than frank, classical scurvy, symptoms which, in part at least, are common in normal pregnancy.**

However, scurvy has been seen to develop in pregnancy. Vitamin C is thought to have a function in the healing of surgical wounds, which may be of importance in the healing of the injuries of labor.

Vitamin C requirements can usually be supplied satisfactorily by the diet. Such vitamin C rich foods as citrus fruits and juices, green peppers, strawberries, and many greens, are the chief sources. Citrus fruits and tomatoes stand out as readily available sources. With proper canning and preserving, the vitamin content is maintained for long periods of time. Prophylactically, such foods are sufficient in pregnancy. For active treatment in severe deficiency, purified preparations, at times parenterally, may be necessary.

Increased requirements of vitamin C continue through lactation. Human milk has been found to contain approximately 5 mg. ascorbic acid per 100 c.c., so that for a daily secretion of 800 c.c. milk, 40 mg., equal to the usual average maintenance dose, are necessary in addition to the mother's usual needs. The vitamin C content of human milk varies with the dietary intake and is four to five times that of cow's milk.

*Vitamin D.*—In infancy, vitamin D deficiency results in rickets; in the adult, in osteomalacia. Symptoms of osteomalacia are few. Irritability, undue sweating, pain in the lower back, and stiffness of the legs are common complaints. The child may be born with evidences of calcium, phosphorus, and vitamin D deficiency. Both rickets and osteomalacia may be produced by other factors which change the relationships of calcium and phosphorus metabolism. In the discussion on calcium and phosphorus it was stated that an adequate vitamin D supply was presupposed. Here, in discussing vitamin D, an adequate intake of calcium and phosphorus is presupposed, for added vitamin D does not insure retention of calcium with intakes below 1.4 to 1.6 gm. daily.[10]

The daily requirement of vitamin D is not definitely known. In infants, 135 to 400 I.U. are minimum and should be exceeded. In adults, the requirement is unknown, for vitamin D is formed in the body by solar irradiation of the skin. In pregnancy, the requirement is elevated. Chief sources are irradiation and the diet. Foods rich in vitamin D are egg yolk, fish roe, liver, herring, sardines, and canned salmon. Use of cod liver oil or similar preparations is not generally routine in pregnancy, but in many instances should be advised in at least teaspoon doses, or solar irradiation used instead. This is especially true in frequent pregnancies for poor retention of calcium and phosphorous may result, regardless of intake, unless vitamin D is also given.[10] Vitamin D is strongly advised in all pregnancies and in lactation as well.

Calcium and phosphorous are necessary for milk production and vitamin D requirements remain elevated during lactation. Milk intake has been suggested in amounts as large as 1.5 quarts per day at this time, but even then relatively few women can prevent calcium loss without added vitamin D.[10] This is even more true with rapidly succeeding pregnancies and lactation. Doses of 800 I.U. or more of vitamin D are suggested.

It should also be remembered that old vitamin D deficiency of infancy may be important to the patient after reaching maturity and becoming pregnant, for maldevelopment of the pelvic bones from rickets in infancy may lead to difficult labor.

*Vitamin E.*—Vitamin E, identified as alpha-tocopherol, is known to be necessary for fertility and successful gestation in rats. There is no direct proof that clinical deficiency produces such an effect in man. The vitamin is widely distributed in nature, occurring in yeast, animal tissues, germs of seeds, and particularly in lettuce and other green vegetables.

**There are many reports of successful treatment of functional sterility and habitual abortion in the human, so that when this does take place, a trial of the vitamin is justified, although the Council on Pharmacy and Chemistry of the American Medical Association has not found sufficient proof to accept preparations for such use.**

Reports indicate that the use of wheat germ oil, the usual preparation, in habitual abortion, is attended by successful outcome in 75 to 80 per cent of the cases. Yet similar results have been obtained by other methods of treatment, such as progestin and vitamin C, and in one report, the spontaneous cure rate without any treatment was 78.4 per cent after one abortion.[2] Such results indicate that the efficacy of vitamin E in these patients remains to be established.

Recent reports of the use of vitamin E in the treatment of muscular and nervous disorders have thus far indicated no relationship to human pregnancy.

*Vitamin K.*—Vitamin K is essential to the proper formation of prothrombin, and a deficiency of the vitamin results in impaired prothrombin formation, impaired clot formation in the blood, and, finally, hemorrhage. Vitamin K occurs in considerable amounts in alfalfa, kale, spinach, dried carrot tops, tomatoes, oat sprouts, egg yolk, soy bean oil and some other vegetable oils. Bile is necessary for its proper absorption, and this accounts for impaired absorption in obstructive jaundice, eventuating in lowered blood prothrombin values and hemorrhage. Hemorrhagic disease of the newborn has been found to occur upon the basis of vitamin K deficiency[15] and is corrected by the administration of concentrates of the vitamin or synthetic preparations, such as 2-methyl-1, 4-naphthoquinone, in 1.0 mg. doses with 5 to 10 grains of animal bile salts. In the newborn without hemorrhagic phenomena, the prothrombin time is often prolonged, particularly from the second to the fifth day. Interestingly enough, this tendency may be corrected not only by administration of vitamin K and bile salts to the child, but by their administration to the mother at the beginning of, or early in, labor.

### Summary

We have presented a short sketch of the known facts concerning the nutritional needs of the mother when first she is carrying the baby in utero and later when she is suckling it. We would emphasize strongly the necessity of an ample, well-rounded diet in order to preserve the well-being of the pregnant woman, and in order to have her give birth to a healthy child.

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# Appendicitis

## The Problem from an Educational Standpoint

By R. G. Robinson, M.D.
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■ Some ten thousand articles on appendicitis are to be found in medical literature. Three interesting statements appear, as a rule, in the majority of recent publications on the subject. (1) There are about 20,000 deaths annually from the disease. (2) Eighty per cent of the deaths are due to generalized peritonitis. (3) There could be a 75 per cent reduction in mortality if patients were seen early enough and the proper treatment immediately instituted. These three statements formulate a challenge which we as a profession must face. There are two aspects to the problem. One involves lay education which is now being carried on in an ever increasing volume by means of radio, public lectures, and

to some extent through our schools. The second aspect is that of the availability of efficient medical care.

The increasing death rate from appendicitis suggests that organized medicine may well seek further avenues through which the simple important facts of health and disease may be brought to the public. From this standpoint, appendicitis is one of many important common diseases of which more should generally be known. While it is true that we cannot overlook the fine efforts already operative, yet we as medical men note too long an interval between the inception of the disease and medical consultation. Likewise, abusive ingestion of cathartics and complete lack of suspicion of the passibility of appendicitis by the laymen clearly indicate a need for some more effectual approach to our problem.

### A Proposal

Our schools provide an excellent medium through which health education may be extended. This in itself is not a new idea but one whose possibilities have not been fully utilized. Well-designed programs of preventive medicine are now doing excellent work. A simple course in the lower grades and junior high schools, teaching simple rules and precautions about health and diseases, would not only have great intrinsic interest but would undoubtedly save many lives. Too many grade, high school and college graduates possess insufficient general medical information to protect themselves against tragedies, such as ruptured appendix. A recent survey by the United States Office of Education showed that less than 10 per cent of college students, other than medical students, had taken any courses pertinent to health or hygiene.

Curricula ought therefore recognize that general medical information, sufficient to make the individual intelligently concerned about his body as he is about his mind, is necessary. To be sure there are now a few courses which may be elected by the student. In other instances courses in hygiene, etc., are required. These are, however, altogether too limited in scope. A great job in public health education could be accomplished if there were compulsory courses in grade schools, high schools and in colleges which went beyond the usual physiologic and hygienic limitations. A more intelligent public would undoubtedly bring the patient to his physician earlier. The effect on mortality rates generally would be apparent over an adequate period of time. As physicians and guardians of the health of the public, it is our duty to see that adequate courses are outlined and also that state and local educational boards be duly petitioned. This should, of course, be sponsored by our State Medical Society assisted by local County Societies.

### The Second Consideration

From the standpoint of the operating surgeon no plea for a broader educational effort, designed to effect an earlier recognition of appendicitis, could possibly be considered effectively stated without a word as to the responsibilities of the corner druggist and finally the physician himself.

Too often the appendicitis patient presents himself first to our friend the druggist whom he induces to give him something for "stomach ache." And too often the something he procures is not advice to see his family physician, but some form of catharsis. Unquestionably all of us have encountered time and again cases of drug store meddling of this nature. As physicians, it is our explicit duty to duly censor such practices and emphatically discourage this form of prescribing. No doubt a few lives could be saved in this manner.

The practicing physician must ever have in mind certain basic facts about appendicitis if he is to render efficient medical care. It should be his policy to catalogue these facts as rules to this end. Let it be remembered that appendicitis is an indefinite general term which encompasses a number of clinically different states in the progress of this disease. The physician must attempt to visualize from the data at hand just what state the appendix is in. He must, therefore, refine his diagnosis and classify his case.

### Classification

I. Acute Uncomplicated Appendicitis
II. Acute Complicated Appendicitis
    A. Gangrene
        1. Acute perforation
            (a) Local peritonitis
            (b) Generalized peritonitis

(1) without ileus
(2) with ileus
2. With pylephlebitis
3. With liver abscess
B. Appendiceal abscess
III. Chronic Recurrent Appendicitis.

### General Rules

1. Acute epigastric or generalized abdominal pain with or without vomiting, which localizes in the right lower quadrant should be considered appendicitis until proven otherwise.

2. Constipation is generally the rule with appendicitis.

3. Never prescribe a cathartic or a sedative for abdominal distress until acute surgical abdomen has been eliminated.

4. Repeated physical examinations, white cell counts, differentials, Schilling Indices, and attention to pulse and temperature curves are necessary to ascertain the progress of appendicitis.

5. Generally, a temperature of 101 degrees or above with a pulse rate of 110 or above in acute appendicitis of more than twelve hours' duration means complications are present or eminent.

6. The prognosis of appendicitis in the extremes of life is always poorer.

7. The treatment of appendicitis is surgical and always demands the immediate services of a competent surgeon.

8. Do not classify appendectomy as a simple operation.

9. Whenever the diagnosis is uncertain and the possibility of appendicitis must be considered, three points must be determined:

(a) Is the case surgical?
(b) Is watchful expectancy reasonably safe?
(c) Do the findings justify operation?

These important questions must be worked out by competent observers in consultation. In every case the patient should receive that treatment which will safeguard his life.

### Conclusions

Fifteen thousand deaths could be prevented yearly by more effective education as to the facts about appendicitis. Our present educational program could be made more effective if secondary schools and colleges included in their curricula simple informative courses designed to make the individual reasonably intelligent about some of the common illnesses which affect the human body. The move for greater dissemination of medical knowledge through the school system should be the problem and duty of our State Medical Society. This fine opportunity for real effective service should not be overlooked.

If the physician desires to give competent service to his patient he must mentally visualize what is transpiring at any given moment; he should catalogue his information and formulate working rules wherever possible. He must consult without hesitancy with his confreres and always urge the institution of that treatment which will most effectively avoid tragedy.

3751 31st Street.

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### Vitamin Content of Citrus Fruits

The following table shows approximate amounts of the substances listed in Florida oranges, grapefruit and tangerines:

| | Oranges per 100 c.c. of freshly expressed juice | Grapefruit | Tangerines |
|---|---|---|---|
| Vitamin C. | 50 mgm. | 40 mgm. | 35 mgm. |
| Vitamin B. | 20 Sherman units | 20 Sherman units | No data |
| Vitamin G. | Present | Present | No data |
| Vitamin A. | Present | No data | Present |
| Calcium | 8 mgm. | 9 mgm. | 13 mgm. |
| Phosphorus | 17 mgm. | 15 mgm. | 12 mgm. |
| Carbohydrate | 11.6 gm. | 10.1 gm. | .. |
| Citric Acid | 0.9 gm. | 1.31 gm. | 0.75 gm. |
| Potential alkalinity | 5 c.c. N/ alkali | 4.5 c.c. N/ alkali | 4.5 c.c. N/ alkali |
| Fuel value | 52 calories | 45 calories | .. |

—From *Citrus Fruits and Health,* by Florida Citrus Commission.

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### Social Aspects of Tuberculosis

The prevention of tuberculosis is not merely a public health problem but also a powerful social and economic factor which affects the economic structure of the entire nation.

"At a time when all values have tumbled and numerous assets have to be classified as frozen, the health and productivity of the people remain the outstanding and most tangible resources of a nation and it would be the short-sighted policy of the penny-wise and dollar-foolish to curtail preventive health measures for the sake of economy," says Dr. Karl Fischel of Saranac Lake.

The tuberculosis problem is closely linked with other momentous issues of the day, and the tuberculosis death rate of the future is, therefore, bound to be affected by the solution of other problems, be it unemployment, inflation, commodity prices or disarmament.—(From an essay awarded the Leon Bernard Memorial prize for 1938 by the International Union Against Tuberculosis) Fischel, Karl, Bull. de l'Union contre Tuberc., 1939, 16.

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# One Examination for Selectees

A thorough conscientious examination of every applicant is the first and most important requisite of an insurance company before it accepts a risk.

The thousands of selectees for the peace-time army are being examined by civilian draft boards in each locality. This peace army is to be composed of perfect men who can stand the strain of a year's training without physical or mental breakdown.

If after induction in army activities by an army board, a soldier manifests a physical or mental disease acquired prior to induction, and must be discharged, he is a liability on our government. In the past war, the cost rose and mounted into the millions of dollars. The induction boards therefore are rejecting a higher percentage than are the civilian boards. They are held responsible and must trim down cases which local doctors of medicine certify as perfect.

Between the time the selectee is placed in 1-A and the moment he reports to the induction board, many things may happen to his physical or mental condition; some are self-induced. The reports of the army boards are sent back to the draft boards and the examining physicians may compare their diagnoses to the rejection causes.

The ideal way to release the civilian doctors for duty at home defense centers would be to use the reserve officers who now compose the induction boards as traveling examining boards, to rotate them over a given area, and to have them make one complete examination—after which the applicant is in the army.

Let us continue to do our part in this work, but if it is to continue permanently, let us ask for a revision of the laws, to increase efficiency.

President's Page

President, Michigan State Medical Society

# EDITORIAL

## CANCER IN MICHIGAN

■ At the request of THE JOURNAL, C. C. Little, Sc.D., Managing Director of The American Society for the Control of Cancer, Inc., and former President of the University of Michigan, has contributed a special statement on cancer control in Michigan.

It is indeed gratifying to have such a distinguished authority compliment the advance made in the state. The Cancer Committee of the Michigan State Medical Society continues active and progressive and deserves its full share of credit for its part of the work.

**"The record of the State of Michigan in the field of cancer control is an excellent one, comparing favorably with the highest standards of effectiveness attained in any of the states.**

"For the purposes of convenience the state is divided into two areas, one including Wayne, McComb and Oakland Counties, and, of course, the City of Detroit, and the other comprising the rest of the state.

"The organization of cancer control work has, for the most part, been carried on in Michigan by volunteer women under the direction of cancer committees of the state and local medical societies. This latter policy of medical supervision is insisted upon by the American Society for the Control of Cancer which works through its creation—the Women's Field Army.

**"Cancer is, of course, unique in that actual individual participation of those interested in the program of education must be obtained and maintained if the campaign is to have any value. Mere acquisition of information is not enough. There must be follow-up and constant pressure to see that individuals do not ignore the advice contained in the informational material which they receive.**

"A series of eight Regional Assemblies of Women's Field Army officers and medical advisors has just been completed and the society has announced that the evidence is general that the increase in percentage of patients coming early to the doctors is country-wide and progressive. This means that the campaign to defeat the fear of cancer is already well in sight of a victory, and that following the removal of such fear we may expect that greater results of education will make themselves felt.

"At all events, both the medical profession of Michigan and the lay officers of the Field Army who are coöperating with it are to be congratulated for work already done and encouraged in every possible way in the advancement of that to be carried on."

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## READ AND WRITE

■ A great deal of criticism is voiced about the voluminous writings of the profession.

**This criticism is not warranted.**

**It is not the voluminous writing which should be criticized so much as the voluminous publication of these writings.**

The value of a thesis is not primarily in the publication thereof. To assemble the data necessary to produce a scientific article requires much reading and serious thought. It requires the investigation of many viewpoints and differences of opinion. This reading cannot be superficial and must be accompanied by a singleness of purpose which impresses the material on the mind of the writer. This data must be assembled in logical order and the various view-points balanced and weighed against each other. Then the ultimate thought must be put in intelligible form.

Medical journals welcome the submission of all manuscripts for review and are glad to publish them if they are of sufficient value and interest to the reader. But even though the paper never appears in print that one man has been well repaid for his work, the interest of his patients more completely satisfied and a better physician is the result.

## DON'T TELL THE WORLD

The other day the secretary of a western Michigan county medical society made the statement that the first time that one of his members asked why laws unfavorable to the medical profession were enacted by the legislature, "all hell will break loose." He continued his statement by detailing how he had pled with his members to interview their local representatives to the state government and in spite of promises, not a single one had even broached the pertinent subject to the legislators.

Of course, this situation is so common that the secretary was not even commiserated.

**You, and every other member of the Michigan State Medical Society, are informed by the secretary of your county society of all bills bearing on medical subjects introduced in the two houses. Usually every week or two your representative will visit your district over the week end or longer and will not only listen to, but be considerably influenced by, your opinion as to the value of these bills.**

Don't tell it to the world. Don't grumble in the doctor's room. Tell it to your legislator.

# In Memoriam

**John F. Adams** of Ann Arbor, Michigan, was born February 16, 1867, at Woodville, Ontario, Canada. He came to Michigan at the age of twenty-one, and a year later, entered the College of Physicians and Surgeons of the University of Illinois where he was graduated in 1893. He engaged in practice at Mt. Pleasant, Michigan, for a number of years, and twenty-five years ago moved to Ann Arbor where he was an active member of the profession until his death on January 10, 1941.

**George H. Belote, M.D.**, of Ann Arbor, was born in 1894 in Centerville, Michigan. A student at the University of Michigan in 1916, his studies were interrupted by army service in the World War; he enlisted in the headquarters troops of the 85th division in July, 1917. He received his commission as second lieutenant in 1918 and was honorably discharged in 1919. He returned to the University and was graduated from the medical school in 1923. From 1923 to 1925 he was an intern at the University Hospital. He then became instructor in the dermatology department. In 1928 he was named assistant professor and in 1930 was made associate professor of dermatology and syphilology. Doctor Belote was a member of the University School faculty for seventeen years. His work won him national recognition as an authority on dermatology and syphilology. He died on March 11, 1941, after an illness of three weeks.

**J. E. Bolender** of Grand Rapids, Michigan, was born at Hubbardson in 1885 and was graduated from the University of Michigan Medical School in 1912. He started his practice in Sparta where he remained until he came to Grand Rapids, ten years ago. Dr. Bolender died on January 9, 1941.

**Arthur H. Burleson, M.D.**, of Olivet, Michigan, was born September 19, 1861, in Quincy, Michigan, and was graduated from the University of Michigan Medical School in 1896. Doctor Burleson first started practicing at Albion, a year later moved to Tekonsha, where he remained until 1906, when he located in Olivet and practiced there for thirty-four years. Doctor Burleson was an Honorary Member of the Michigan State Medical Society since 1932 and had served as secretary of Eaton County Medical Society for a number of years. He died December 17, 1940.

**Don Bruce Cameron** of Grand Rapids, Michigan, was born in White Pigeon, Michigan, on Oct. 24, 1896. He studied at Olivet college for three years and was graduated from the University of Chicago with the degree of bachelor of science. Following graduation he enlisted in 1917 and later engaged in research work at Walter Reed hospital, Washington, D. C. He later entered the officer's training camp at Camp Taylor and was commissioned a lieutenant in the field artillery. After the war Dr. Cameron entered Rush Medical College and was graduated in 1922. He served his internship at St. Luke's Hospital, Chicago, and in November 23, 1927, started practice in Sturgis, where he remained until 1927 when he accepted an appointment as resident surgeon at Butterworth Hospital. The following year Dr. Cameron opened offices in Grand Rapids which he maintained until he was forced to abandon them last October because of ill health. He died January 17, 1941.

**Kenneth W. Dick** of Imlay City, Michigan, was born April 17, 1886, in Ontario, Canada, and was graduated from the Detroit College of Medicine in 1907. He maintained a practice in Detroit for 18 years. In 1928 he moved to Carsonville, and in 1937 became a staff member of the Home and Training School, Lapeer. He began practice in Imlay City in 1939. Doctor Dick was vice president of the Lapeer County Medical Society in 1940 and had been reëlected for 1941. He died January 25, 1941.

**Thomas Jefferson Henry** of Detroit, Michigan, was born in 1861 in Ontario, Canada, and was graduated in 1900 from Trinity Medical College, Toronto. Doctor Henry was a member of the staff of Grace Hospital and had maintained a practice in Detroit for over forty years. He died December 24, 1940.

**J. G. Huizinga** of Holland, Michigan, was born in 1868 and was graduated from the University of Michigan Medical School in 1890. Doctor Huizinga established a practice in Holland and then went to Englewood, a suburb of Chicago. While there, he served as professor of ophthalmology at the former Chicago Eye, Nose and Throat College. Later he practiced in Grand Rapids and remained there thirty years. Some ten years ago he returned to Holland. Doctor Huizinga died in Lake City, Florida, on December 20, 1940.

**Alexander H. MacPherson, M.D.**, of Grand Rapids, was born in 1880 at Grand Rapids and was graduated from the University of Maryland at Baltimore. Doctor MacPherson has practiced in Grand Rapids for thirty-five years, except for the duration of the World War when he served as medical chief of the Base Hospital at Camp Grant, Illinois, with the rank of captain. He died on March 7, 1941.

# YOU AND YOUR BUSINESS

## ROSTER NUMBER

The annual directory of membership will be published, as usual, in the May issue of THE JOURNAL which goes to press April 10.

Physicians who have not as yet mailed their county and state medical society dues to their county secretary are urged to do so in order that their names may appear in the Roster Number of the MSMS JOURNAL as members of the Michigan State Medical Society.

## MICHIGAN HOSPITALS AND MEDICAL PAYMENTS PLAN

This voluntary agreement, entered into and approved by the American Mutual Alliance, the Association of Casualty and Surety Executives, a group of Michigan insurance carriers, the Michigan Hospital Association and the Michigan State Medical Society, has been developed to solve a most annoying problem: doctors and hospitals have in the past experienced difficulties in securing the payment of fees from patients who have collected damages from persons causing their injuries, despite the fact that in such cases a part of the patient's financial recovery actually was based on hospital, medical and surgical expenses.

The voluntary agreement of the insurance carriers and associations, and the hospitals and medical profession of Michigan is aimed to more definitely assure hospitals and physicians of payment for their services to those individuals who are injured in accidents and who, because of their injuries, are indemnified by an insurance carrier.

In order that the insurance companies may furnish the fullest coöperation (and for the hospitals' and physicians' own proper protection), physicians and hospitals are requested to notify insurance companies promptly of any claim upon which an order has been or may be issued.

Forms for the convenience of physicians and hospitals have been devised and are available in pads of 50 and 100 (25c and 50c respectively). Signify Form 1, 2 or 3 and the number desired when writing the Secretary, 2020 Olds Tower, Lansing. These forms were printed in the February MSMS JOURNAL, pages 126-127-128.

## IN MICHIGAN, IT'S TWO YEARS

Statutes of limitations—another form of defense in malpractice actions—were designed "to prevent the unexpected enforcement of stale claims, concerning which persons interested have been thrown off their guard by want of prosecution" (Miller v. Calumet Lumber and Mfg. Co., 121 Ill. App. 56); the various state legislatures realizing, in enacting these laws, that time will erase the best evidence by loss, destruction of records, or death of witnesses, and that if there is a just cause of action it will be begun at once. —SAMUEL WRIGHT DONALDSON, A.B., M.D., F.A.C.R., *The Rœntgenologist in Court.* Charles C. Thomas, 1937.

## CALL IT "THE BEAUMONT BRIDGE"

WHEREAS, Plans are in progress for the construction of a bridge from Mackinac City to St. Ignace, connecting the two beautiful peninsulas which constitute the State of Michigan, and

WHEREAS, The area in the vicinity of this great public project is sanctified by the research work and scientific contribution of an Army doctor, William Beaumont, Doctor of Medicine, who, in 1833 at Fort Mackinac, with keen scientific insight and true medical interest, made the first publication of physiology of digestion. This work, done under tremendous difficulties, was the most important on this subject to that date and laid much of the foundation for future studies. His studies were begun at an isolated military post in the wilderness of Northern Michigan and completed only by following up his patient and bringing him nearly two thousand miles to Plattsburg, New York. This is one of the great dramatic episodes in the history of medicine, and

WHEREAS, The contributions of Doctor Beaumont to the science of medicine have saved untold lives and relieved the distress and pain of thousands of our fellow beings, therefore, be it

RESOLVED, That the proper authorities be petitioned by the Michigan State Medical Society to christen this bridge structure in honor of William Beaumont, M.D., as a method of publicly recognizing this great physician for his contribution to the relief of human suffering.

The above resolution was adopted unanimously by the House of Delegates of the Michigan State Medical Society in September, 1940.

No more fitting and honorable name could be

given to the span between the Upper and Lower Peninsulas of Michigan than "The Beaumont Bridge."

## ASSOCIATION OF PHYSICIANS AND CULTISTS

The following statement of policy was adopted by the House of Delegates of the American Medical Association in June, 1938, and by the Michigan State Medical Society's House of Delegates in September, 1938:

Many inquiries concerning the relations of the various cults to the regular profession have been received. The inquiries pertain particularly to the osteopath and the optometrist. Some of our members are giving lectures in osteopathic and optometric schools and addresses before their societies. Some members are associated by a common waiting room in offices with them. Some members are by mutual agreement professional associates principally in the field of surgery. There are some instances of partnership in practice. All of these voluntarily associated activities are unethical. Such relations certainly do not "uphold the dignity and honor of (our) profession" or "exalt its standards." In case of emergency no doctor should refuse a sufferer knowledge or skill which he possesses to the sufferer's harm but this is quite a different matter from that of a consultant or practitioner who by consulting or practicing with him assists a cultist to establish himself as competent and on the same basis of medical knowledge as a doctor of medicine. By the very nature of the education and training of each, a consultation with a cultist is a futile gesture if the cultist is assumed to have the same high grade of knowledge, training and experience as is possessed by the doctor of medicine. Such consultation lowers the honor and dignity of the profession in the same degree to which it elevates the honor and dignity of the irregular in training and practice. Practicing as a partner or otherwise has the same effect and objection. Teaching in cultist schools and addressing cultist societies is even more reprehensible, for such activities give public approval by the medical profession to a system of healing known to the profession to be substandard, incorrect and harmful to the people because of its deficiencies. There hardly can be a voluntary relationship between a doctor of medicine and a cultist which is ethical in character.

*86c out of each $1.00 gross income used for members benefit*

**PHYSICIANS CASUALTY ASSOCIATION**
**PHYSICIANS HEALTH ASSOCIATION**

Hospital, Accident, Sickness
**INSURANCE**

For ethical practitioners exclusively
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| LIBERAL HOSPITAL EXPENSE COVERAGE | For $10.00 per year |
| $5,000.00 ACCIDENTAL DEATH<br>$25.00 weekly indemnity, accident and sickness | For $33.00 per year |
| $10,000.00 ACCIDENTAL DEATH<br>$50.00 weekly indemnity, accident and sickness | For $66.00 per year |
| $15,000.00 ACCIDENTAL DEATH<br>$75.00 weekly indemnity, accident and sickness | For $99.00 per year |

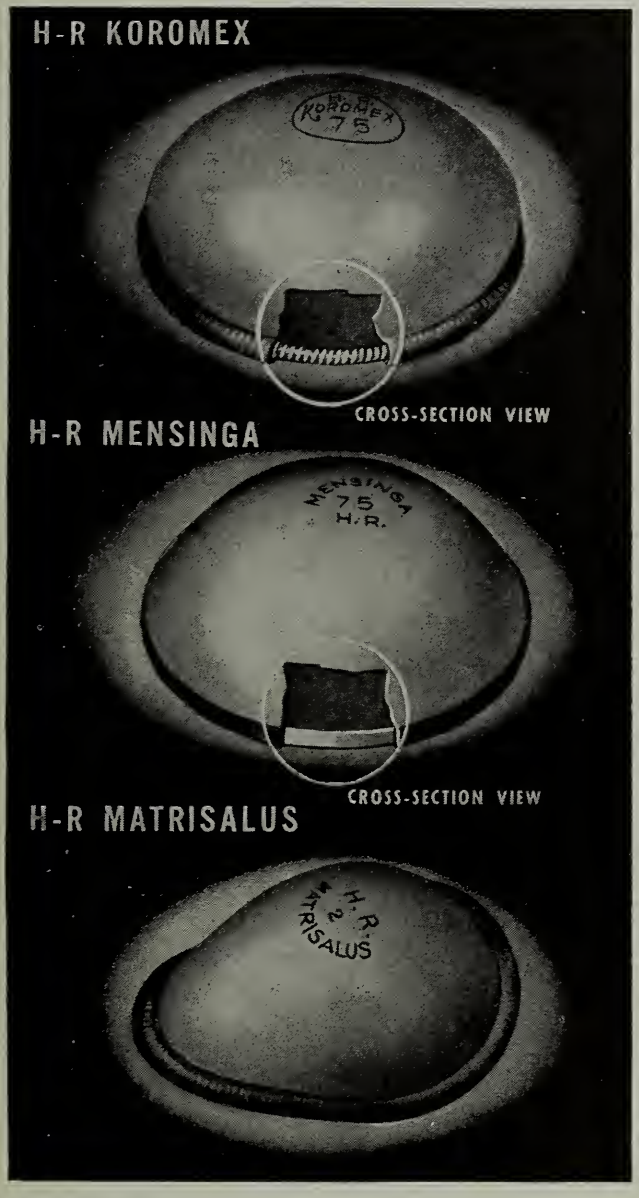
*38 years under the same management*
**$1,850,000 INVESTED ASSETS**
**$9,500,000 PAID FOR CLAIMS**
$200,000 deposited with State of Nebraska for protection of our members.
Disability need not be incurred in line of duty—benefits from the beginning day of disability.
*Send for applications, Doctor, to*
**400 First National Bank Building Omaha, Nebraska**

## BENEFITS OF MEMBERSHIP

The Michigan State Medical Society and its component county societies bring you many valuable benefits of membership, especially these of a professional and educational character:

1. Assurance of a high ethical standing for you in the community, the state and the nation, before the public, the law, and the profession.
2. Postgraduate courses and lectures to keep you in touch with medical progress and to improve professional ability.
3. Your common interests safeguarded through the vigilant work of democratically selected officers who are men of your own kind: (a) who know your problems and those of your patients; (b) who serve generously without compensation; (c) who need and ask for your coöperation and advice.
4. Benefits accruing from the action of numerous committees constantly working to advance your interests as a physician in your community; machinery solving problems of preventive and curative medicine which could not be worked out by you as an individual, even with a great sacrifice of time and effort.
5. Maintenance and constant improvement of standards of medical practice for the protection of patients.
6. A monthly Journal of high quality with the latest scientific literature, and general information important to you.

# Diaphragms for EVERY Condition

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***Send for copy of "Physician's Diaphragm Chart and Fitting Technique"***

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# MICHIGAN'S DEPARTMENT OF HEALTH

HENRY A. MOYER, M.D., Commissioner, Lansing, Michigan

## RECORD LOW INFANT DEATH RATE

**Michigan's infant mortality record for 1940 is the best the state has had, according to provisional figures. Deaths of babies in their first year were at the rate of 40.72 per 1,000 live births, a lower rate than ever before. It was the third successive record.**

**If there had been 72 fewer deaths of infants, the rate would have dropped under 40 for the first time. Detroit's rate has been under 40 since 1938. The provisional rate for Detroit in 1940 is 38.14.**

"In the last ten years, the infant death rate has been cut a third," says Commissioner H. A. Moyer, "and the result is that in 1940, more than 2,000 babies lived who would have died in 1930."

The figures for 1940 and 1930 follow:

| | 1940 | 1930 |
|---|---|---|
| Births | 99,139 | 98,882 |
| Deaths under 1 yr. | 4,038 | 6,213 |
| Deaths per 1,000 live births | 40.72 | 62.83 |

Commissioner Moyer said that prenatal care is demanded by more women than ever before, and that the quality of medical care throughout pregnancy and at birth is better than ever. The Department's bureau of maternal and child health, established in 1920 when the infant death rate was two and a half times what it is today, has worked actively with physicians for years in an effort to bring greater safety and ease to mothers at birth and to improve the care of both mother and baby afterwards.

In the last three years, 126 physicians have taken two-week leaves of their practices to modernize their obstetrical work in postgraduate studies at the University Hospital at Ann Arbor. The studies have been sponsored by the Department and have been available without charge to physicians, on the endorsement of their county medical society.

Furthermore, the Department has coöperated with the Michigan State Medical Society, the University of Michigan, and Wayne University in taking into the field postgraduate material through lectures. One pediatric and two obstetric consultants from the Department's staff are also in the field, at the call of physicians.

Michigan is not yet in the group of states having the lowest infant death rates. The latest comparative figures are the provisional census rates for 1939, which show 14 states under a rate of 40. The lowest rates in 1939 were: Minnesota 35.4, Connecticut 36.1, Nebraska 36.5, Oregon 36.6, Washington 36.7. Washington was the first state to achieve a rate under 40, when it had a rate of 38.8 in 1933.

Nationally, the infant death rate has been dropping for several years. It went below 50 for the first time in 1939, when it was 48.0, compared with 51.0 in 1938.

## NEAR EPIDEMIC OF MEASLES

As expected, measles cases in Michigan are now being reported in epidemic numbers. The reports from physicians are coming from nearly all sections of the state.

Prediction of 1941 as an epidemic year had been made because of the three-year cycle evident in recent years. In 1935 and again in 1938, 80,000 cases were reported.

**Every physician in the state has received or will receive a new measles pamphlet prepared especially for medical men. It is called "This Is a Measles Year, Doctor!" The preparation of authoritative material on prevention and treatment of measles and its complications was made with the coöperation of the Michigan branch of the American Academy of Pediatrics and the Child Welfare Committee of the Michigan State Medical Society.**

The new pamphlet is eight pages, folded five by eight inches in size, and it carries a tab for ready reference in a file. In counties with full time health departments, distribution of the pamphlets is made through the health officer. In other counties, copies were mailed, as addressed by the executive office of the State Medical Society.

Measles cases reported in February totaled 9,510. This compares with February reports in previous epidemic years as follows: February, 1938, 10,473; February, 1935, 4,617. The January cases in 1941 totaled 6,485, a much larger total than the January reports of either 1938 or 1935, when the figures were 3,056 and 1,264, respectively.

The big months in the previous two epidemic years were March, April and May, when 15,000 to 25,000 cases a month were reported.

## NEW HIGH RECORD IN BIRTHS

Births in 1940 totaled 99,139, provisionally, five per cent more than in 1939, and only a few hundred under the all-time high of 99,940 births in 1927.

The birth rate, calculated on the final census population for the state of 5,256,106, is 18.86 births per 1,000 population. This is the highest birth rate since 1930, when it was 20.4.

Births for selected years follow:

| | |
|---|---|
| 1940—99,139 | 1935—87,403 |
| 1939—94,432 | 1930—98,882 |
| 1938—96,962 | 1920—92,245 |
| 1937—91,566 | 1910—64,109 |
| 1936—88,457 | 1900—43,699 |


### CLASSIFIED ADVERTISEMENTS

OPPORTUNITY FOR PHYSICIAN—Associate needed for general practice. Opportunity for permanent association if mutually satisfactory. Write Box C, 2020 Olds Tower, Lansing, Michigan.

PRIVATE HOSPITAL FOR SALE—Established 1932. Fully equipped for major surgery and obstetrics. Good chance for nurse and husband. Will sell on terms, or will give good discount for cash. Ill health reason for selling. If interested, write Rowe Memorial Hospital, Stockbridge, Michigan, for full particulars.

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# Woman's Auxiliary

Only a few more weeks and the members of the Woman's Auxiliary of the American Medical Association will be arriving in Cleveland for their annual convention, June 2-6. Have you made your reservations? If not, send your request, *at once,* to Dr. Edward F. Kieger, Chairman of Committee on Hotels and Housing, 1604 Terminal Tower Building, Cleveland.

**Bay County**

The Woman's Auxiliary to the Bay County Medical Society met at the home of Mrs. D. J. Mosier on Feb. 12, for a buffet dinner at 6:30, with twenty-one present.

Mrs. W. R. Ballard presided at the business meeting which followed, and appointed Mrs. P. R. Urmston, Mrs. E. S. Huckins and Mrs. R. C. Perkins on the nominating committee to present a new slate of officers at the next meeting.

The members decided to designate Tuesday as the day the medical auxiliary would work at the Red Cross rooms.

Miss Helen Hudson, general secretary of the Y.W.-C.A., addressed the group on the subject, "International Trade Routes."

Mrs. J. Norris Asline

**Ingham County**

The Auxiliary held its January meeting at the home of Mrs. John Albers in East Lansing. The date fell upon Inaugural Day, and the social chairman, Mrs. Harold Miller, in coöperation with the hostess, had arranged a most beautiful display of flowers and lighted tapers in the patriotic colors of red, white and blue.

The program chairman, Mrs. Robert Breakey, presented Mrs. Hugh Wilson of Ann Arbor as the speaker for the afternoon. Mrs. Wilson won the Avery Hoopwood award at the University of Michigan several years ago and since that has published many stories and plays in various papers and magazines. We listened to a most interesting talk on her career. Mrs. Harold Wiley, our president, selected Mrs. L. G. Christian and Mrs. C. F. DeVries to aid Mrs. E. I. Carr on the important legislative committee. The auxiliary voted to invite the Dental Auxiliary to tea for next month. He hope this will be the beginning of a friendship which will be of great mutual value to both groups. The tea was held at the Sparrow Hospital Nurses Home on February 17.

The Ingham County Auxiliary gave a tea in February for the members of the Auxiliary to the County Dental Society and the large attendance at this combined meeting was most gratifying. We hope this will establish a precedent for more meetings and deeper friendly relations between the two groups.

Dr. Harold A. Miller, chairman of the Legislative Committee for the State Medical Society, discussed some of the many bills to come up in the legislature and explained the way bills go in for passage. It was a timely discussion and an interesting question hour followed. We had a friendly social hour following the meeting and a lovely tea was served by Mrs. H. A. Miller, Mrs. Robert Breakey and assistants.

Margaret S. Davenport


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**Jackson County**

The February meeting of the Woman's Auxiliary to the Jackson County Medical Society was held at the home of Mrs. Harold Hurley. Forty-one members were present.

It was voted to accept the invitation of the Jackson Woman's Club to attend the lecture of Henry C. Wolf, foreign correspondent, author, and lecturer, March 18.

The program was in charge of Mrs. George Hardie who introduced Mrs. George Baker of Parma. Mrs. Baker reviewed Evelyn Eaton's "Quietly My Captain Waits."

The members were delighted with Mrs. Bakers interpretation of the story.

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**Kalamazoo County**

The January meeting of the Kalamazoo Auxiliary was held at the home of Mrs. William E. Shackleton, January 21. Mrs. Martin Patmos and Mrs. Katherine Armstrong were the assisting hostesses.

A coöperative dinner was enjoyed by the thirty members and guests present. The latter were wives of the Medical Staff from Fort Custer.

Mrs. Kenneth Crawford, president, conducted the business meeting. A report was made on the recent purchase, by the auxiliary, of a wheel chair, which is to be placed in the Loan Closet at the Health Service in the City Hall. This chair is to be available to anyone in the community in need of it.

Mrs. Walter den Bleyker, public relations chairman, presented the program for the evening. Her subject was "Socialized Medicine."

The Auxiliary to the Kalamazoo Academy of Medicine held a coöperative dinner Tuesday, February the eighteenth, at the home of Mrs. W. Bartlett Crane, South Rose Street. Mrs. Ralph Shook and Mrs. John Littig assisted the hostess. A most enjoyable evening was spent by the thirty-five members present.

Following the business meeting the remainder of the evening was spent informally.

Frances Rigterink

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**Kent County**

The January meeting of the Kent County Woman's Auxiliary was held in the Grand Rapids Public Museum.

After the luncheon served by teams led by Mrs. Jerome Webber and Mrs. Harold Damstra the group was addressed by Dr. Pearl L. Kendrick on "Contributions of the Public Health Laboratory to the Community." Dr. Kendrick is Director of Western Michigan Division of the Michigan Department of Health Laboratories and is internationally known for her fine work on pertussis vaccine.

A business session led by the president, Mrs. Guy DeBoer, closed the meeting.

The February meeting of the Woman's Auxiliary to the Kent County Medical Society was held Wednesday afternoon, the twelfth, in the auditorium of the Public Museum. Mrs. J. E. Meengs presided at the business meeting, after which Mrs. James A. Work, Jr. of

Elkhart, Indiana, presented a paper on "Dr. Albert Schweitzer."

A recording of Bach's "Prelude to the Fugue in E Minor" played by Schweitzer was given as an appropriate conclusion to Mrs. Work's sketch.

Mrs. L. Paul Ralph and Mrs. George L. Riley and their committees served tea after the program.

PEARL GAIKEMA

**Monroe County**

On the afternoon of January 21, 1941, the Auxiliary and guests met for luncheon at the Monroe Golf and Country club. There were eighty-three in attendance.

Miss Margaret Slater, Sergeant Policewoman of the Toledo, Ohio, Police Department, spoke on "Woman's Part in the Prevention of Crime." She was presented by Mrs. Robert J. Williams, President, who also presented two special guests, Mrs. Roger V. Walker, president, and Mrs. A. O. Brown, secretary of the State Auxiliary.

The Auxiliary met January 28 for an afternoon meeting at the home of Mrs. Edgar C. Long. There were twelve in attendance and after a short business meeting tea was served by the hostess and the group sewed for the Red Cross.

GENEVIEVE L. REISIG,
*Press Chairman.*

**Washtenaw County**

The Woman's Auxiliary of the Washtenaw County Medical Society held its regular meeting in the Michigan Union on Tuesday, December 10.

Mrs. Mathew Soller, Public Health Nurse, spoke on the Health Program in the public schools of Ann Arbor. Mrs. Robert Graham gave a number of book reviews on popular medical books.

The members of the committee on British War Relief were on hand to receive donations of blankets and warm clothing to be sent to England.

The members also responded generously to a call for food donations, to be placed in Yuletide baskets for the needy.

The Woman's Auxiliary of the Washtenaw County Medical Society enjoyed a potluck dinner meeting Tuesday, January 14, at the home of Mrs. Harry A. Towsley. After the routine business meeting the members played games and enjoyed a social hour.

The Auxiliary, with Mrs. Dean Myers as chairman, is collecting surgical instruments from members of the profession to be sent to Great Britain.

The February meeting was a joint meeting with the husbands as guests at the Michigan League.

**Wayne County**

The Woman's Auxiliary to the W.C.M.S. held its December meeting on Friday the 13th at the Society's headquarters.

The business meeting was followed by an address by Colonel H. W. Miller of the Engineering Department of the University of Michigan, who spoke on "The Causes and Progress of the Present War."

Colonel Miller analyzed the present conflict in respect to the racial characteristics of the warring nations, their social and economic problems, and the great wars of the past.

On Saturday, December 21, the children of members of the Wayne County Medical Society were guests at a Christmas party at the Society's clubrooms. More than 150 little people were present to meet Santa, who had brought gifts for each. A puppet show, a children's band concert, and a carol service were followed by refreshments.

Gay little voices and merry laughter echoed through-


A friendly suggestion: Your "littlest" patients aren't the only ones, Doctor, who enjoy wholesome **CHEWING GUM**

The enjoyment of delicious chewing gum is a real American custom—probably because chewing is such a basic, natural pleasure.

Enjoy chewing gum yourself. See how the chewing helps relieve tension by giving it a try during your busy days.

Have some gum in your pocket or bag and in the office. Your patients—children and adults—appreciate your friendliness when you offer them some. Try this for a month—you'll be pleased with the results.

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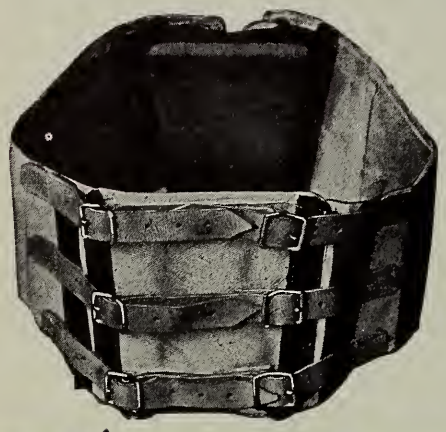

Since the Mayo was designed some years ago, we have sent it to nearly every country in the world—evidently the most efficient Belt of its type on the market.

The Belt is made of heavy Orthopedic Web with a ***separate abdominal plate*** which allows for ***accurate*** adjustment and a suitable chamois Sacral Pad which permits concentration on Sacrum. Belt should be buckled tightly in front on each side, then all the pressure concentrated on pad by the lacings provided for that purpose. To fit, take measurement around the hips three inches below the Iliac crests, or directly over the trochanters.

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out the rooms and were proof that the efforts of Mrs. William L. Sherman, chairman of the Social Committee, were thoroughly appreciated.

The Woman's Auxiliary to the Wayne County Medical Society held its regular monthly meeting on Friday, February 14, at 2:00 P. M.

Following the meeting Mrs. A. Duane Beam, Program Chairman, presented Dr. Frederick S. Yonkman, who spoke on "Experimental Contribution to Advancement in Medicine."

Mrs. Leo P. Rennell, Mrs. Louis J. Bailey, Mrs. Richard C. Connelly, and Mrs. Edgar E. Martmer were hostesses at the tea which concluded the program.

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## LETTER TO THE EDITOR

March 14, 1941.

Dr. Roy Herbert Holmes, Editor
Journal of the Michigan State Medical Society

Dear Dr. Holmes: Recently there has been established in this library, with the approval of The Surgeon General of the Army, a microfilm copying service and a weekly Current List of Medical Literature prepared from the cards made for future issues of the Index Catalogue. These two projects are conducted under the auspices of a recently organized group of Friends of the Army Medical Library.

The object of this undertaking is to place the resources of this library at the disposal of those who are engaged in the advancement of medical research, irrespective of where they live or work.

Undoubtedly there are many readers of your journal who would be interested in learning of this service and it would be highly appreciated if you could assist us in making facts more widely known, through the columns of your journal. As Librarian of the Army Medical Library, I have a great interest in the work the Friends of the Library are doing, and although I take no part in this officially, I have left no stone unturned to aid them in their work.

Sincerely yours,
HAROLD W. JONES,
Colonel, M.C., U. S. Army,
The Library.

# ✶ COUNTY AND PERSONAL ACTIVITIES ✶

**100 Per Cent Club of 1941**

Barry
Ingham
Luce
Manistee
Muskegon
Oceana
Ontonagon
Tuscola

The above county medical societies have certified the 1941 dues of 100 per cent of their membership. A number of other societies have certified all but a few of their 1940 members. As soon as these few have paid their 1941 dues the list of 100 per cent county societies will be much larger.

*Wm. G. Gamble, M.D.,* Bay City, addressed the Northern Michigan Medical Society at Cheboygan on March 13 on the subject of "Shock."

* * *

*The Michigan Association of Industrial Physicians and Surgeons* will hold its 1941 annual meeting in Detroit on April 16.

*Frank H. Power, M.D.,* Field Consultant in Cancer for the Michigan State Medical Society, addressed the Athena Club at Algonac on Tuesday, March 4, on the subject of "Cancer."

* * *

*The American Medical Golfing Association* will hold its 27th Annual Tournament on Monday, June 2, over the Country Club and Pepper Pike Courses, Cleveland, Ohio. For detailed information and application blank, write Bill Burns, 2020 Olds Tower, Lansing.

* * *

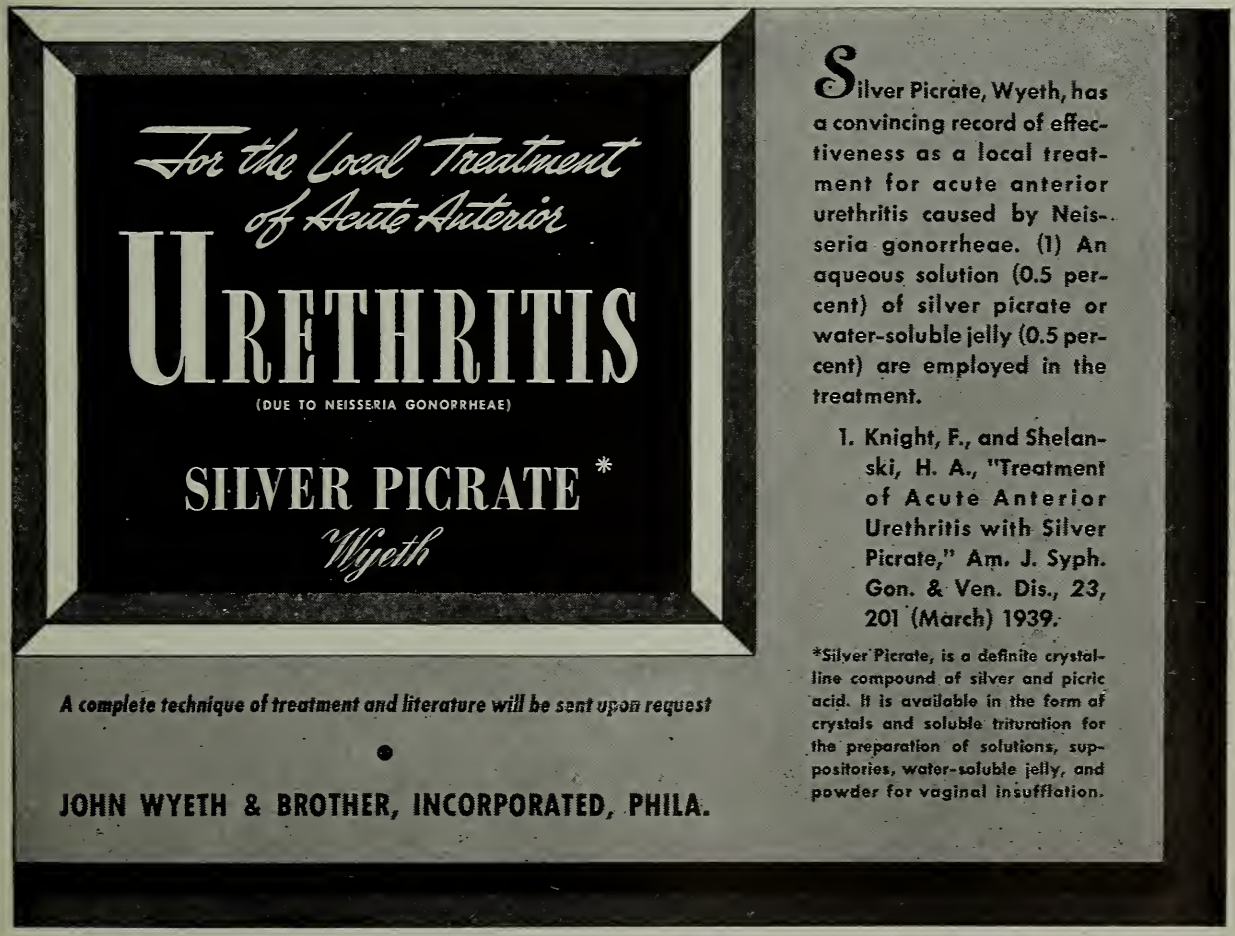
*Louis J. Gariepy, M.D.,* Detroit, was recently honored with the presentation to him by the Staff of Mt. Carmel Mercy Hospital of a beautiful plaque on which the following inscription appears "Presented in recognition of outstanding service."

* * *

*The American Association of Industrial Physicians & Surgeons* will hold a postgraduate institute in Pittsburgh on May 5 to 8. The Institute will mark the 26th annual meeting of the Association and the second annual meeting of the American Industrial Hygiene Association.

* * *

*Alpha Epsilon Delta,* the national honorary premedical fraternity, installed its thirty-second chapter at the University of Detroit on March 8, 1941, when the Iota chapter of the Omega Beta Pi fraternity became the Michigan Alpha chapter with the induction of twenty students and two faculty members.

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*George A. Zindler, M.D.,* and Franklin O. Meister, M.D., have joined the medical staff of the Battle Creek Sanitarium. Dr. Zindler was associated with the University of Michigan and Wayne University before entering private practice in Detroit; Dr. Meister has been associated with the University of Wisconsin.

* * *

*"The Foundation Prize"* of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons has been announced by James R. Bloss, M.D., Secretary, 418 11th Street, Huntington, W. Va. All manuscripts must be in the hands of the Secretary before June 1. The prize consists of $150.00. For rules write to the Secretary.

* * *

*Eloise Hospital,* Psychiatric Division, announces its second annual Post Graduate Clinic for General Practitioners, Wednesday, April 23, 1941, from 8:30 A. M. to 5:00 P. M. All members of the profession are invited. No fees.

* * *

*A one-day conference sometime in June on Student Health Practice* is being arranged for physicians and others interested in this work. Address inquiries concerning plans for the conference to Dr. Claire E. Healey, University Health Service, University of Michigan, Ann Arbor, Michigan.

* * *

*Wm. J. Burns,* Executive Secretary of the M.S.M.S., addressed the Highland Park Physicians Club in Highland Park on March 6, on the subject of "The Trends of Legislation."

"Medical Legislation" was the subject of another address by Mr. Burns before the Clinton County Medical Society on April 7 in St. Johns.

* * *

*Carleton Dean, M.D.,* of Lansing has been appointed Director of the Crippled Children Commission, effective April 1. Doctor Dean has been serving as Deputy State Health Commissioner for the past year and half, prior to which time he was director of a county health unit in Northern Michigan. Doctor Dean comes to the Crippled Children Commission with the best wishes of the medical profession.

* * *

*Michigan Medical Service* and Michigan Hospital Service celebrated their First and Second Anniversaries respectively at a banquet held on March 26 at the Hotel Statler, Detroit. Father Alphonse Schwitalla, S. J. Dean of the Medical School of the University of St. Louis, and James A. Hamilton, Past President of the American College of Hospital Administrators, were the out-of-state guest speakers.

* * *

*Basic Science Appeal Lost.*—The chiropractors' appeal to the Michigan Supreme Court on the opinion of Hon. Vincent M. Brennan, Judge of the Wayne County Circuit Court in the case of Timpona vs. the Basic Science Board testing the constitutionality of the Basic Science Law, has been dropped. Therefore, the opinion of Judge Brennan upholding the validity of the Basic Science Law stands and the law's constitutionality is firmly established.

* * *

*Captain L. A. Potter,* Inspector for the Michigan Department of Health, has been busy investigating the activities of irregular and unlicensed practitioners. Among those recently brought to court was a Charles DeBoer a chiropractor of Lansing who has been practicing without a license. Numerous other irregular practitioners have removed signs indicating "doctor" without qualification after investigation and warning from Captain Potter.



*Say you saw it in the Journal of the Michigan State Medical Society*

*The Parents' Institute, Inc.,* of New York City, announces the introduction of TRUE COMICS which is a magazine using the color appeal and other features of popular comics, but depicting exciting events of present and past history. It is the aim of the Parents' Institute in introducing this educational magazine for children to satisfy the demand for colored picture type magazine but at the same time eliminate the lurid magazines featuring fantastic excitement, in colored picture form, portraying impossible, often grotesque characters.

**OFFICIAL CALL**

The American Medical Association has issued the Official Call to the officers, fellows and members for its 92nd annual session to be held in Cleveland, Ohio, June 2 to 6, 1941. The headquarters hotel will be Hotel Statler, Cleveland. Write Dr. Edward F. Kieger, 1604 Terminal Tower, Cleveland, Ohio, TODAY for hotel reservations.

*The Annual Refresher Course* given in Detroit will be held on April 28 at Henry Ford Hospital; April 29 at The Children's Hospital; and on April 30 at Herman Kiefer Hospital. Among the lecturers included on the three-day program are Drs. W. C. C. Cole, P. J. Howard, Warren Wheeler, Don Barnes, J. A. Johnston, J. P. Pratt, C. L. Mitchell, John Law, Benjamin Carey, Zuelzer, T. B. Cooley, James Wilson, Lee Vincent, Saul Rosenzweig, Loren W. Shaffer, Norman C. Wetzel, Bruce Douglas, J. A. Kasper, E. E. Martmer, Franklin Top and Donald Young.

* * *

*The American Academy of Physical Medicine* will hold its nineteenth annual meeting and scientific session on April 28-30, in New York City. Headquarters will be in the Hotel Pennsylvania. Clinics will be held at the Medical Center, New York Orthopædic Hospital, Post Graduate Hospital and the Skin and Cancer Hospital. All members of the medical profession and those of related interests are invited to attend. No registration fee. Write Herman A. Osgood, M.D., 144 Commonwealth Avenue, Boston, Massachusetts, for detailed information and program.

* * *

*The Seventy-Sixth Annual Convention and Exhibition* of the Michigan State Medical Society will be held at the Hotel Pantlind-Civic Auditorium, Grand Rapids, September 17 to 19, 1941. A galaxy of eminent nationally known physicians will bring you an intensive three-day postgraduate program that you will not want to miss. In addition, more than one hundred scientific and technical exhibits will be displayed for your information and enjoyment. Plan now to come to Grand Rapids next September. Write today for your hotel reservations.

* * *

*Doctor, remember* your particular friends, the exhibitors, at your annual convention, when you have need of equipment, appliances, medical supplies and service. Here are ten more of the firms which helped make the 1940 convention such a success:

Lea & Febiger, Philadelphia.
A. Kuhlman & Company, Detroit.
Jones Metabolism Equipment Company, Chicago.
The G. A. Ingram Company, Detroit.
Horlick's Malted Milk Corporation, Racine, Wisconsin.
Holland-Rantos Company, New York.
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The J. F. Hartz Company, Detroit.
Hanovia Chemical and Mfg. Company, Newark.
Hack Shoe Company, Detroit.


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*Doctors Recruiting.*—Britain is beginning to feel a shortage of doctors and is discussing with U. S. officials some kind of appeal for volunteers from this country. Since the U. S. fears a similar shortage later, a countersuggestion is being made in Washington. This is a plan to encourage the several thousand refugee doctors (mostly German and Austrian) now in the U. S. to go to England. Many of these, for various technical reasons, haven't been able to obtain U. S. medical licenses, but they would be welcomed by Britain. The above ideas haven't yet taken definite form, but specific proposals are likely to be publicized before long.—*Newsweek,* March 17, 1941.

* * *

*Physical Examinations Ordered by Any Court, Board, Etc.*—A new law (Act 18 of 1941) has just been placed on the statute books which requires the payment of fees to persons ordered to take a physical examination by any court, board or commission, or other public body or officer. The law is very brief and reads as follows:

Whenever in any proceedings before any court, board or commission, or other public body or officer, an order is made by such court, board or commission, or other public body or officer, requiring and commanding that a person shall submit to a physical examination, the order shall also provide that the attorney for such person may be present at such physical examination if the party to such examination desires that an attorney representing him be present. The order shall also recite and provide that the party to be examined shall, at least 3 days prior to the date set for said examination, be paid a fee of $2.00 per diem for the day ordered for attendance, and that such party also be paid a mileage fee at the rate of 10 cents per mile in going to the place of attendance, to be estimated from the residence of such party. The court, board or commission, or other public body or officer, may in its order determine the fees and mileage to be paid, and when so fixed, such determination shall be conclusive. A correct copy of any written report rendered by the examining physician relative to the condition of such person shall be delivered forthwith to such person or his attorney.

* * *

*The Radio Committee* of the Michigan State Medical Society has arranged broadcasts of talks on the following subjects over radio stations in Battle Creek, Bay City, Detroit, Flint, Grand Rapids, Houghton, Jackson, Kalamazoo, East Lansing, Muskegon, Marquette and Port Huron: In December: Diabetes, Sinus, The Value of X-ray Examination in Accidents and Emergency Cases, Colitis, Artificial Fever Therapy.

In January: Relationship of Dentistry and Medicine, Scarlet Fever, Eyestrain in Mental and Physical Development, and Simple Facts about How We Hear.

In February: Premarital Examinations; The Importance of Prenatal Care; The Menopause; The Value of Anesthesia in Surgery and Medicine.

In March: Can Cancer be Cured? Refrigeration Treatment of Cancer, The Common Causes of Fatigue, and Misconceptions About Heart Disease.

The members of the Radio Committee who arranged for these worthwhile talks and the individual physicians who delivered them have earned the sincere thanks of the medical profession for a good piece of work.

* * *

### DETROIT NEXT

Detroit was awarded the 1942 Conference. For the first time in our history, the Detroit Society will be host to the meeting of all the Chapters of the American Society for the Hard of Hearing.

We are proud of the honor and privilege to entertain and serve the members of this national body in our beautiful city. It is our sincere hope that we shall be able to stage as fine a Conference as the one just closed in Los Angeles.

It is not too early to begin working now toward that goal. We trust that our members will unite and give us their earnest coöperation and help.—*The Rainbow.*

# THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

BIOLOGICAL ASPECTS OF INFECTIOUS DISEASE. By F. M. Burnet, M.D., Assistant Director, Walter and Eliza Hall Institute, Melbourne. New York: The MacMillan Company. Cambridge, England: The University Press, 1940. Price: $3.75.

This Australian scientist discusses the various infectious diseases from the standpoint of biology. In a most interesting manner he portrays the universal significance of bacteria and higher forms of plant and animal life, including man. His words, "Infectious disease is seen as a part of the balance of life where existence of one form of life depends upon the existence of others." To every physician and member of the allied professions it will provide interesting and thought-provoking reading. It is recommended for every physician.

---

STRANGE MALADY. The Story of Allergy. By Warren T. Vaughan, M.D. Line Drawings by John P. Tillery. New York: Doubleday, Doran and Company, Inc., 1941. Price: $3.00.

In this second book in the American Association for the Advancement of Science Series, Vaughan has attempted to simplify the knowledge and the theory of allergic response. It would take an exceptionally well educated layman to understand some of the chapters but to a physician who has not been able to keep up in the study of this condition, this book will provide interesting and informative reading. The use of cartoons in describing the various reactions is especially commendable. The excellent standing of Warren Vaughan is sufficient to warrant justification in recommending this book.

---

ELECTROCARDIOGRAPHY IN PRACTICE. By Ashton Graybiel, M.D., Instructor in Medicine, Course for Graduates, Harvard Medical School; Research Associate, Fatigue Laboratory, Harvard University; Assistant in Medicine, Massachusetts General Hospital; and Paul D. White, M.D., Lecturer in Medicine, Harvard Medical School; Physician, Massachusetts General Hospital, in Charge of the Cardiac Clinics and Laboratory. Philadelphia and London: W. B. Saunders Company, 1941. Price: $6.00.

This volume is arranged as an atlas as well as a study book on the interpretation of electrocardiograms. The electrocardiograms have been carefully selected and the scope is unusually complete. Every physician who is interested in interpretation of electrocardiograms will be well repaid for adding this volume to his library. The authors rank among the highest in this field.

---

FOOD, TEETH AND LARCENY. By Charles A. Levinson, D.M.D., Author of "The Examining Dentist in Food Hazard Cases." New York: Greenberg, Publisher, 1941. Price: $3.00.

The author has filled this book with case reports and follow-ups on hundreds of true and false claims of damage, to the teeth and mouth particularly, caused by foreign substance in foods. It is of interest to all dentists and all physicians who are interested in the medico-legal side of medicine. His pessimistic view of the unscrupulousness of his professional colleagues is not pleasant but may be excused because of his long association in investigating these types of swindles.


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### INGHAM COUNTY CLINIC

The Annual Clinic of the Ingham County Medical Society will be held Thursday, May 1.

11:30—Round table discussion by Dr. Tom Spies of Birmingham, Alabama, and Dr. Harry Newburgh of the University of Michigan—"Management of Obesity."

1:30—Dr. William Scott of Toronto, Ontario—"Ante Partum Hemmorrhage."

2:15—Dr. John Lundy of the Mayo Clinic—"The Choice of an Anesthetic."

3:30—Dr. John Scudder of New York—"Evaluation of Shock and Its Treatment."

4:15—Dr. Owen H. Wangensteen of Minneapolis—"Management of Abdominal Distension."

5:30—Social Hour

6:30—Dinner

7:30—Dr. Tom Spies—"Avitaminosis and Nutrition."

It is sincerely hoped that all members of the Michigan State Medical Society and their friends and guests who may find it possible to be present will take advantage of the invitation of the Ingham County Medical Society to attend this Clinic.

## READING NOTICES

### CHEMOTHERAPY IN GONORRHEA

The newer sulfonamides, sulfapyridine and sulfathiazole, are rapidly revolutionizing the treatment of all forms of gonococcic infections. This exact modus operandi is not clearly understood but is assumed to depend on an ill-defined, inherent action as an antiseptic. The cure rates of both drugs, used in the male, are about the same for both early and late cases, and apparently reach 70 per cent or over (Bull. New York Acad. Med., 17:39 and 64, 1941). Because of its lower toxicity, sulfathiazole appears to be rapidly supplanting sulfapyridine in clinical usage. The sulfonamides are marketed by Eli Lilly and Company in a wide variety of dosage forms.

---

### HIS FIRST CEREAL FEEDING

The baby's first solid food always excites the parent's interest. Will he cry? Will he spit it up? Will he try to swallow the spoon? Far more important than the child's "cute" reactions is the fact that figuratively and physiologically, the little fellow is just beginning to eat like a man.

Many a parent, with limited knowledge of nutrition, attempts to do the baby's tasting for him. Partial to sweets, the mother sweetens her child's cereal. Disliking cod liver oil, she wrinkles her nose and sighs: "Poor child, to have to take such awful stuff!" The child is quick to learn by example, and soon may become poor indeed—in nutrition, as well as in mental habits and psychological adjustment.

Appreciating the importance and difficulties of the physician's problem in establishing and maintaining good eating habits, Mead Johnson & Company continue to supply Pablum in its natural form. No sugar is added. There is no corresponding dilution of the present protein, mineral and vitamin content of Pablum. Is this not worth while?

---

### NEW COLOR FILM ON VITAMIN B COMPLEX AVAILABLE

The apparently high incidence of sub-clinical deficiency states associated with the lack of the vitamin B complex and the difficulty of recognizing and diagnosing such conditions make the announcement of a new motion picture on the vitamin B complex one of special interest. The title of the new film is "The Vitamin B Complex"; it is entirely in 16 mm. Kodachrome. A *sound* as well as a *silent* version is available to medical societies and medical schools.

The film is based largely on clinical material from the Nutrition Clinic, Hillman Hospital, Birmingham, Ala. The cases selected for the most part were not so much those exhibiting the classical syndromes, but rather were of the mild type frequently involving mixed deficiency states and less endemic in character.

The film, "The Vitamin B Complex," was produced under the supervision of the scientific and medical staffs of E. R. Squibb & Sons, and was reviewed before release by authorities of international repute in the field of medicine and nutrition. There is no advertising in the film which is offered solely as a conservative review of the present status of the subject. Inquiries with reference to the loan of the film may be addressed to E. R. Squibb & Sons, Professional Service Department, 745 Fifth Avenue, New York, N. Y.

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# HALF A CENTURY AGO

The Twenty-sixth Annual Meeting of the Michigan State Medical Society was held at Saginaw, June 11 and 12, 1891.

The President, Lyman W. Bliss of Saginaw, gave his annual address entitled, "The Dignity of the Profession." He said:

"When we contemplate the marvelously constructed house, in which for a few brief years dwells the immortal soul of man, we are lost in wonder and awed into silence at the stupendous hand-work of Almighty God. No glowing language, no descriptive eulogy by man, nor the thrilling measures of the poet's verse can paint the wonders of our human frame." * * *

* * * "The physician is the guardian of this vast laboratory of nature, and in order to show the great responsibility that lies upon him, let us for a moment consider some of his duties. The paramount object of every practitioner should be to heal the sick, bind up the wounded, and care for the distressed in the most scientific, honorable, and gentlemanly manner. This being the case, an intelligent profession is demanded; demanded for a two-fold reason: first, because of the importance of the office of the practitioner, his duty toward those placed within his trust, and also because of the advanced age in which we live. The days of log cabins, ox teams, spinning wheels, hand looms, tallow candles and quack doctors are ended. We are warranted in the belief that the America of fifty years ago is just as much the America of today, as the America of today will be the America of fifty years hence. We are living in times of mighty advancement, and the ragged, shoeless, hatless boy of the street has opportunity to learn more in a single year than did his forefathers in ten. In ages gone by, the modern means of securing knowledge was not placed within the reach of the common people, but today our homes are filled with magazines, newspapers, models of taste and labor and the knowledge of art. These advantages increase our opportunities and add to our responsibilities. The time was, in some of our southwestern states, when a practitioner's complete equipment consisted of a box of quinine, a keg of whiskey, a mustang pony and two revolvers. Evidences of quackery practiced in years gone by are still fresh in our memories. I remember a circumstance which transpired in the presence of a personal friend, in the State of Nebraska in 1880, during the malarial season. A western doctor was called to visit a family sick of fever and ague. After the usual salutation and examination of their cases, he said: "Some of you are seriously ill; your chances for recovery are certainly very slender, unless prompt action and extreme measures are resorted to. You will at once get some fish-worms, boil them in new milk and then give the liquid to the sick members of the family once every hour. If this treatment fails, I know of no other that will restore health under the circumstances." Such transactions were numerous and of vital injury to all honest, intelligent, and honorable gentlemen connected with the practice of medicine; but we rejoice that their days are numbered and that pure dignity and ignorance never go hand in hand. The people of today are a reading, intelligent and observing people and will not be imposed upon. The dignity of the profession is largely dependent upon the gentlemanly conduct of the practitioner; haughtiness or arrogance are sometimes mistaken for dignity, but they are vastly different. True dignity, in any profession, is gentlemanly, kind, charitable, and never fails to receive a just reward.

"The dignity of the profession is sometimes injured by young and ambitious physicians, who are so anxious to succeed that they frequently forget the obligations of the practitioner to those engaged in the same profession. Everyone contemplating the practice of medicine should remember that success cannot be secured in a single day or year, and that the only sure road to a successful life is the way which leads us through the fields of honesty and fair dealing one with another. While we rejoice in the vigor of manhood, and love to see every young man energetic and aspiring, we should at all times remember that our obligations to others should never be disregarded. On the other hand a lack of self-confidence or desire to win has a damaging influence and should always be avoided." * * *

* * * "We cannot acquire success in any profession or business in a day or even in a year. I, as a marksman, may make a marvelous shot, and it is the wonder of the community and conversation of all. A young man just commencing the practice of law makes a great plea before a jury, and by this, it is generally conceded that he won the case and secured the verdict, yet this only gives him limited local reputation.

"Col. R. Finley Smiley, the distinguished Southern orator, when addressing a class of law students, very timely and very eloquently said: 'Were a young lawyer enabled to incorporate all the legal knowledge of all the learned lawyers of heaven to the chariot of eloquence and ride forth with Samson-like strength and Demosthene's oratory and hurl the fiery darts of burning speech into the ears of the jury, until each and every juror would, with weeping eyes and throbbing heart, fall speechless under the great pyrotechnical display of genius, he would then have only secured a local reputation and one which, if not added to, would wither and die before the frosts of ten winters had passed away.'

"A mechanic erects a costly house with wonderful dispatch and great skill, and for a time he is the subject of conversation in all the mechanical circles of the neighborhood. Or a young minister delivers a magnificent sermon—strong in logic and practical in its conclusions—and in a little time he is the admired of all the admiring, yet this is not reputation, this is not character, it is simply fleeting notoriety, which of itself alone is almost valueless. A physician cures one remarkable case, in which he restores the almost dead to life, and he also secures this notoriety for an hour. But I, as a marksman, must be able to make a winning shot whenever I raise my rifle. The young lawyer will be expected to make subsequent efforts of equal strength, if not stronger than he made on a prior occasion. He will have to make strong the weak points of law and present the case to the jury, successfully carrying it with him, before he will ever secure the reputation and be recognized as a great lawyer. The young mechanic will have to furnish evidence of perseverance, skill, and success, time after time, before a meritorious character is wholly formed. Although the young minister may be petted and fondled by some who would love to do him favor, he must remember that he will be compelled to think out for himself very many eloquent sayings and figures of speech and evince evidences of masterly reason before he will ever be acknowledged as a fine

*(Continued on Page 334)*

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logician or a great preacher. And the young doctor has yet to watch over more than one desperate case of sickness, and study the deranged system of more than one poor dying patient before he can justly claim title of a great physician.

"These cold facts sound harshly in the ears of thousands of young men, who are dissatisfied with this law and would like to have it changed. They think it strange that the young lords of creation, endowed with such wonderful faculties, accomplishments, and wisdom, cannot at once receive the tribute and homage paid to one whose whole life has been a life of study and of toil. This is the primary cause of failure in thousands of cases.

"Too many young men are willing to make a few powerful efforts and then sit down in discouragement and gloom and wait for fortune to crown them with success. In view of the fact that there is no excellence without great labor, it is the duty of everyone, whether old or young, to achieve every possible victory by personal efforts. Having spent many years in the practice of medicine, my knowledge has been derived by practical experience: and realizing the great necessity of an intelligent profession, I entreat each and every one of you, as fellow laborers, to use every instrumentality for the furtherance of the profession we have espoused, that good may be accomplished and relief brought to every suffering one of the human family that is placed within our care. And if our breasts bear no jewels betokening the approval of an earthly monarch, we know in our own hearts that we have the approval of One greater than all kings and potentates.

"Thanking you for the many tokens of regard and honor shown me and wishing you all abundant success in every laudable endeavor to advance the interest of the profession, I close."

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## COUNCIL AND COMMITTEE MEETINGS

1. *Wednesday, April 9*—6:30 p. m.—Industrial Health Committee—Hotel Olds, Lansing.
2. *Wednesday, April 16*—7:30 p. m.—Representatives of Groups Interested in Afflicted Child Legislation—Hotel Olds, Lansing.
3. *Thursday, April 24*—3:00 p. m.—Legislative Committee—Hotel Olds, Lansing.
4. *Wednesday, April 30*—4:00 p. m.—Child Welfare Committee—WCMS Bldg., Detroit.
5. *Wednesday, May 7*—4:00 p. m.—Committee on Distribution of Medical Care—Hotel Olds, Lansing.
6. *Thursday, May 8*—3:00 p. m.—Executive Committee of The Council—Hotel Olds, Lansing.

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## NEW COUNTY SOCIETY OFFICERS

**Lapeer**

President—D. J. O'Brien, M. D., Lapeer
Vice President—K. W. Dick, M. D., Imlay City
Secretary-Treasurer—H. M. Best, M. D., Lapeer
Delegate—D. J. O'Brien, M. D., Lapeer
Alternate Delegate—H. M. Best, M. D., Lapeer.

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President—W. S. Martin, M. D., Ludington
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President—F. D. Dodrill, M. D., Three Rivers
Secretary-Treasurer—J. W. Rice, M. D., Sturgis
Delegate—R. A. Springer, M. D., Centerville
Alternate Delegate—J. W. Rice, M. D., Sturgis

## COUNTY MEDICAL SOCIETY MEETINGS

*Bay*—Wednesday, March 26—Bay City—Speaker: Robert Moehlig, M. D., Detroit—Subject: "Newer Advances in Endocrinology."
Wednesday, April 9—Bay City—Speaker: Gordon Myers, M. D., Detroit—Subject: "Sulfathiazole."

*Berrien*—Thursday, April 17—Benton Harbor—Speaker: John M. Sheldon, M. D., Ann Arbor —Subject: "Allergy."

*Calhoun*—Tuesday, April 1—Battle Creek—Speaker: Robert S. Breakey, M. D., Lansing—Subject: "Gonococcal Infection in the Female."

*Dickinson-Iron*—Thursday, April 3—Iron Mountain—Speaker: Herbert Landes, M. D., Chicago—Subject: "Hematuria as it Pertains to General Practice."

*Hillsdale*—Thursday, March 27—Hillsdale—Speaker: S. Milton Goldhamer, M. D., Ann Arbor—Subject: "Diseases of the Blood and Blood Organs."

*Ingham*—Tuesday, April 15—Lansing—Speaker: Frederick H. Falls, M. D., Chicago—Subject: "Extra Uterine Pregnancy."

*Jackson*—Tuesday, April 15—Jackson—Speaker: Robert S. Breakey, M. D., Lansing—Subject: "Medical Responsibility in Venereal Disease Control."

*Kalamazoo*—Tuesday, April 15—Kalamazoo—Speaker: Charles F. McKhann, M. D., Ann Arbor—Subject: "Diarrhea and Vomiting in Infants." Also colored motion pictures of contagious diseases presented by Harry Towsley, M. D., Ann Arbor.

*Kent*—Tuesday, April 8—Grand Rapids—Speaker: S. Milton Goldhamer, M. D., Ann Arbor—Subject: "The Use of Liver and Iron in the Anemias."

*Muskegon*—Friday, April 18—Muskegon—Speaker: Phillip Lewin, M. D., Chicago—Subject: "Common Disorders of the Foot and Ankle."

*Oakland*—Wednesday, April 2—Rotunda Inn—Speaker: Arthur C. Curtis, M. D., Ann Arbor—Subject: "Recent Advances in Chemotherapy."

*St. Clair*—Tuesday, March 25—Port Huron—Speakers: W. L. Brosius, M. D. and F. H. Topp, M. D. of Detroit, conducted a clinical pathological conference.
Tuesday, April 8—Port Huron—Business meeting.

*Shiawassee*—Thursday, April 17—Owosso—Regular meeting.

*Washtenaw*—Tuesday, April 8—Ann Arbor—Speaker: John M. Sheldon, M. D., Ann Arbor—Subject: "Allergy in General Practice."

*Wayne*—Monday, May 5—General Meeting, joint session with the Woman's Auxiliary May 12—Medical Section Meeting. Speaker: Bernard I. Comroe, M. D., Philadelphia—Subject: "Arthritis."
May 19—Annual Meeting. Election of Officers.

*West Side—(Wayne County)*—Wednesday, April 16—Speakers: Samuel J. Levin, M. D., Detroit on "Eczema and Fungus Allergy"; Frank L. Ryerson, M. D., Detroit on "Common Diseases of the Optic Fundi" and presentation of talking motion picture entitled "The Pre-school Child."


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# The Changing Picture of Diabetes*

By Reginald Fitz, M.D.
Boston, Massachusetts

Reginald Fitz, M.D.

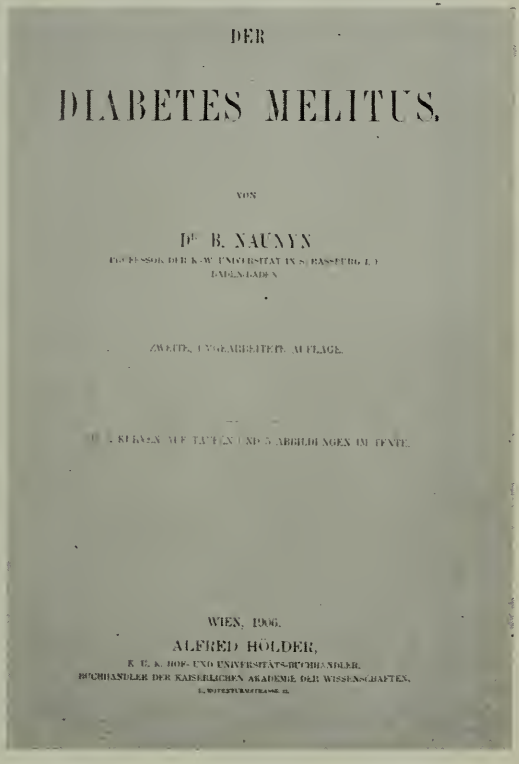
*Lecturer on the History of Medicine, Harvard Medical School; Member Council on Medical Education and Hospitals, American Medical Association; Member Board of Regents, American College of Physicians; Member American Board of Internal Medicine; Consulting Physician, Peter Bent Brigham Hospital, Boston.*

In the preface to the first edition of "Treatment of Diabetes Mellitus," Dr. Joslin[4] remarks, "I have sought to take advantage of what many friends both in Germany and in America have taught me. Professors Naunyn, von Noorden, Friederich von Müller, Magnus-Levy, and Falta, all have helped me with my cases."

## A Fundamental Text

It so happened that not long ago in the Harvard Medical School Library I came across a copy of "Der Diabetes Melitus"† by Naunyn. It was first published in book form in 1906 and this particular copy belonged to my father. Evidently he had treasured it and like Dr. Joslin felt that he, too, had been signally helped in the management of his cases by Professor Naunyn's influence.

Naunyn's book[6] makes interesting reading. It is a scholarly piece of work, virile, imaginative,


DER

DIABETES MELITUS.

VON

DR. B. NAUNYN

WIEN, 1906.

ALFRED HÖLDER,

Fig. 1. Title page of Naunyn's book, still one of the most important texts on diabetes.

and well put together. It contains certain ideas of fundamental importance: notably, the idea of the unity of diabetes and that all diabetics are linked together by a common bond—the inheritance of a diabetic tendency. Naunyn devotes many pages to a discussion of the pathologic physiology of diabetes, to the different glycosurias, to the clinical picture of diabetes, to the classification of diabetes into acute and chronic groups or into mild and severe cases, and he has something to say about treatment—a hundred or

*From the Robert Dawson Evans Memorial for Clinical Research and Preventive Medicine, Massachusetts Memorial Hospitals, Boston. Presented at the annual meeting of the Michigan State Medical Society, Detroit, Michigan, September 20, 1940.

†Dr. Joslin has been kind enough to review this paper for me. He tells me that Naunyn's opinion regarding the correct spelling of Diabetes Mellitus should be inserted. Naunyn says, "Few people except myself write of Diabetes Melitus. It is customary, however, at least outside of England, to use the word *melituria* and thus make of it a Greek derivative. To me it seems sensible for the sake of uniformity and simplicity to apply the same reasoning to the correct spelling of Diabetes Melitus, spelling the adjective *melitus* with one *l*. This I do, though I have few followers."

TABLE I. COMPARISON OF AGE AT DEATH FROM DIABETES AND OF SEX DISTRIBUTION OF FATAL CASES
In 1861-1870 and 1929-1938

| | Diabetic Deaths in England and Wales 1861–1870 (Dickinson) | | | | | Diabetic Deaths in Massachusetts 1929–1938 (Lombard) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Males Total per 1,000 | | Females Total per 1,000 | | | Males Total per 1,000 | | Females Total per 1,000 | | |
| 0– 9 | 103 | 24 | 85 | 38 | 0– 9 | 27 | 6 | 32 | 4 | |
| 10–19 | 334 | 78 | 218 | 98 | 10–19 | 57 | 13 | 54 | 7 | |
| 20–34 | 873 | 204 | 509 | 229 | 20–29 | 71 | 16 | 86 | 10 | |
| 35–44 | 653 | 153 | 384 | 173 | 30–39 | 113 | 26 | 109 | 13 | |
| 45–54 | 746 | 175 | 352 | 158 | 40–49 | 271 | 63 | 420 | 51 | |
| 55–64 | 817 | 191 | 377 | 169 | 50–59 | 784 | 182 | 1,459 | 178 | |
| 65–74 | 594 | 139 | 236 | 106 | 60–69 | 1,429 | 332 | 3,042 | 371 | |
| 75–84 | 146 | 34 | 55 | 25 | 70–79 | 1,231 | 285 | 2,383 | 291 | |
| 85–94 | 7 | 2 | 7 | 3 | 80–89 | 308 | 71 | 590 | 72 | |
| | | | | | 90+ | 18 | 4 | 27 | 3 | |
| Total | 4,273 | | 2,223 | | Total | 4,309 | | 8,202 | | |
| % | 66 | | 34 | | % | 34 | | 66 | | |

so pages in contrast to nearly four hundred pages devoted to other topics.

Naunyn knew a great deal about diabetes. He was a voracious reader and so keen a student of literature that even now if one wishes quickly to find reference to anything bizarre in diabetes Naunyn will have it. Above all, he liked diabetes and the variegated problems presented by the disease.

As I read Naunyn's book I realized more vividly that ever what astonishing progress has been made in the clinical management of diabetes since his day. This progress, too, has all come about in the medical lifetime of many doctors who still are active. In 1908, when Naunyn's book was newly published, I can well remember as a medical student listening to lectures on diabetes by Dr. Joslin who spent considerable time in trying to drill into his pupil's heads the formulary differences between acetone, diacetic acid, and beta-hydroxybutyric acid. This sort of diabetic teaching then was characteristic of the times. Much more was known of the theory of diabetes than of its practical therapy.

As I went through each chapter of "Der Diabetes Melitus" I kept thinking how interested Naunyn would be in all the changes that have come about since he wrote; in the introduction of convenient micro-methods for blood sugar determinations, for instance, or in Van Slyke's machine by which the true degree of acidosis can be measured quickly, or in modern dietetics, or, above all, in insulin and zinc protamine insulin which have changed so completely the life history of the average case.

**It occurred to me that it might be interesting to contrast diabetes as Naunyn saw it with diabetes as any doctor in 1940 sees it in order to bring out, as graphically as I could, how much we owe to him, how fortunate we are in having present-day weapons at our disposal, what a dent these weapons have made in the face of a time-honored illness like diabetes, and how, in spite of this, what a baffling disease in many ways diabetes continues to remain.**

I mentioned my plan to Dr. Joslin and asked him whether he thought the essential character of diabetes had changed at all. He said, no; he felt that diabetes was the same old disease, fundamentally as it always had been and only seemingly modified by modern treatment. This seeming

modification in the course of the disease, however, and all the new clinical problems which have arisen by its seeming modification are impressive enough to suit anyone. Certainly, our modern diabetic problems would be of great interest to Professor Naunyn.

were reported 6,496 fatal cases, and only about a third of these implicated the female sex.

If one compares Dickinson's figures with figures of fatal cases assembled from modern statistics such as in Massachusetts[5] between 1929 and 1938, it is evident that a very striking change

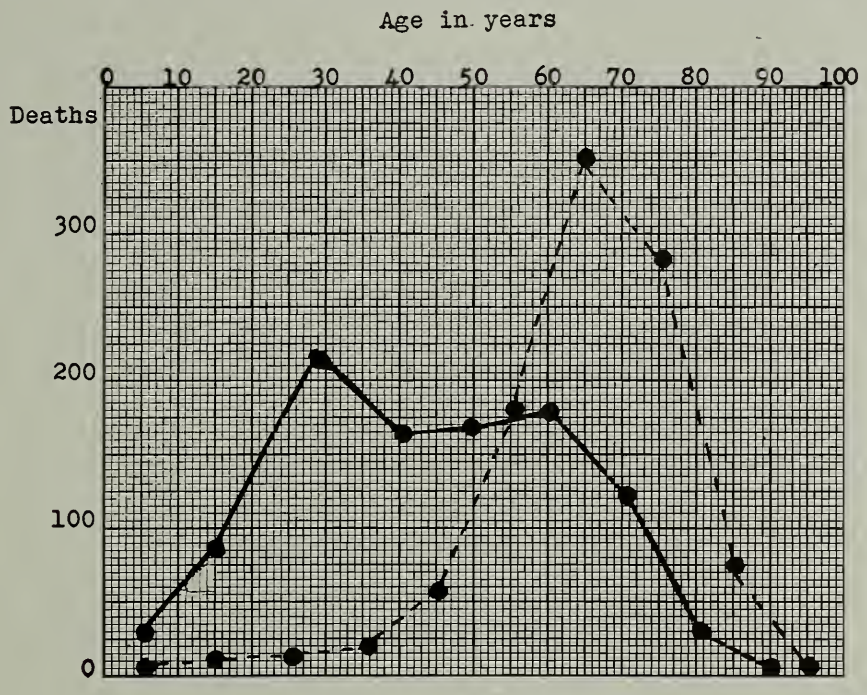



Fig. 2. A comparison of the age per thousand of fatal diabetic cases in England 1861-1870 and in Massachusetts 1929-1938. The solid line represents the earlier series. The age at which diabetics die has changed remarkably.

### Comparative Study

Naunyn built his book almost entirely on a wide knowledge of diabetic literature superimposed on the experience he had gained from carefully studying 131 cases in his own private practice. During the period of three years between 1936 and 1939 my staff and I had opportunity to study, in the Robert Dawson Evans Memorial, as intensively as we wished, a group of 114 cases. It is interesting to contrast diabetes as we saw it recently in a modern institution with diabetes as Naunyn saw it before 1906.

*Influence of sex.*—Naunyn, of course, believed that diabetes was predominantly a disease of the male sex. His reasons for believing this were twofold; because in his practice he saw more men than women with it, and because of accumulated statistics. No doubt his own experience led him to place considerable emphasis on the figures assembled by Dickinson from the Registrar General's reports in England and Wales. During the decade between 1861 and 1870 there has occurred. Diabetes no longer is predominantly a disease of men: rather it appears as a disease more likely to prove fatal to women.

Unfortunately, Dickinson's figures are not tabulated in exactly the same form as are the Massachusetts figures. However, besides showing that more women now die of diabetes than do men, the table also points out pretty clearly another great change. In Naunyn's time young people who developed diabetes were likely to die promptly, whereas now they do not. Therefore, Naunyn was, by necessity, especially interested in the acute form of diabetes in the relatively young and was not much impressed by the geriatrical complications of diabetes which are now so important.

*Climacteric.*—Nor did he recognize another interesting diabetic phenomenon. This is the sharp rise in the severity of diabetes which occurs in both sexes at about the time of the climacteric and during the years following it. Naunyn says that Lecorché claimed that the occurrence of

severe diabetes in women at this particular time was a significant happening. But Naunyn goes on, "My own experience does not confirm this observation nor do Dickinson's figures bear it out." Thus, he failed to pay attention to a very curious thing.

begins to increase very rapidly and increases for the next thirty years of life, an excess mortality from diabetes among women as compared with men being characteristic of the diabetic situation everywhere.

Lecorché, perhaps, was more farsighted than

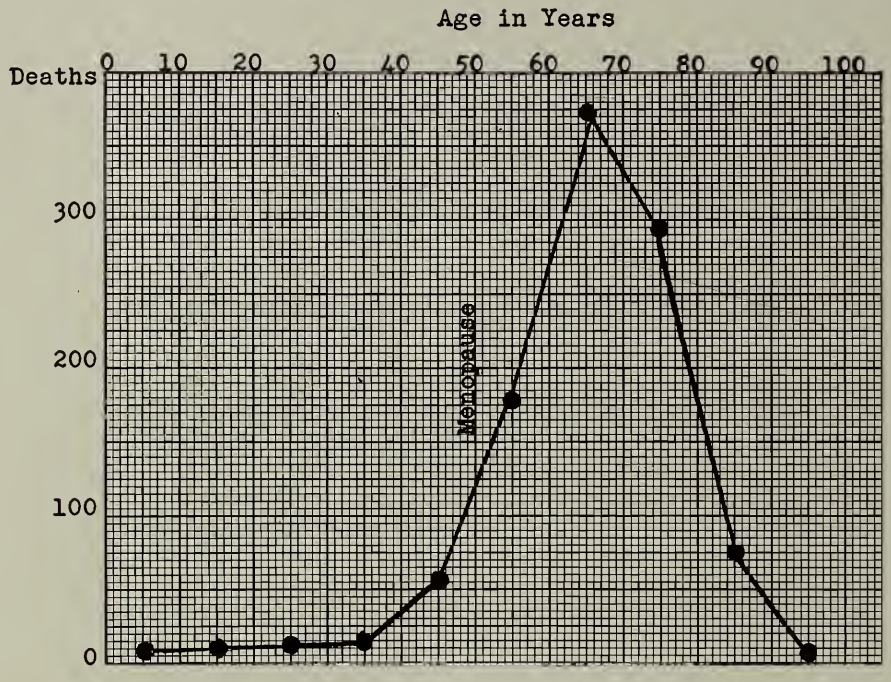



Fig. 3. The severity of diabetes shortly after the menopause as judged by fatal cases. (From Massachusetts figures 1929-1938.)

As a matter of fact, modern statistics from a variety of sources generally agree that diabetes is seen more frequently in women than in men. Those who agree with Dr. Joslin that diabetes is the same old disease as ever, accept Boulduan's[1] explanation as to why its frequency in women was overlooked. Nobody searched for it in Naunyn's time as we do nowadays. Life insurance figures, for example, show that fifty or sixty years ago the proportion of women applying for insurance was small, whereas now more women apply than do men. Doctors did not examine the urine of their women patients routinely as they do now. Patients did not know how to test their own urines or samples from their families and friends. There was greater self-consciousness in mentioning such matters. Thus, the true frequency of diabetes in women was overlooked.

No great emphasis since Lecorché wrote has ever been placed on postmenopausal diabetes. Even Dublin,[2] who juggles diabetic figures with as much agility as anyone, merely remarks that around the menopause the female diabetic rate

subsequent observers. He thought he recognized a connection between the incidence of diabetes shortly after the menopause and this event.

If one does what Naunyn or Lecorché did not have the knowledge to do, and links this coincidence with Young's work by which was produced experimental diabetes in animals through injections of anterior pituitary lobe extract, and with what the modern endocrinologist tells us of the hyperactivity of the anterior lobe at the time of the menopause, one can easily construct a very pretty theory logically to explain the frequency of postmenopausal diabetes. Certainly, this phase of the diabetic situation deserves more careful study than it has so far received.

To return to a comparison between Naunyn's diabetic experience and what is seen today, the first striking difference has been mentioned: the difference in sex distribution. Of Naunyn's 131 cases, only twenty-two were in women. Of the 114 Evans cases, only thirty-five were in men.

*Influence of Age.*—The second striking differ-

ence is in the age spread of the material. Also, as has been suggested, Naunyn saw mainly patients whom nowadays we would regard as youngsters—not a single patient over seventy years of age and mainly people in the forties. In the Evans we had one patient more than eighty years old, twelve patients over seventy, and our largest group was in the fifties.

Stocks[7] has published a stimulating paper on this phase of the diabetic problem based largely, as were Dickinson's statistics, on figures from the Registrar General's office in England. In brief, Stocks believes there is very good proof since the introduction of insulin that there has been an average lengthening of life of all diabetics amounting to three-and-a-half years. The average advantage to the treated case, excluding those not receiving the benefit of insulin, would, of course, be considerably higher.

*Increase in Incidence.*—He makes a peculiar observation, however, which is worth thinking about. He says that the mortality attributable to diabetes in Great Britain has continued to increase since 1922, at ages over fifty-five, at a greater rate than can be accounted for by the postponement of death from the younger ages by insulin; and that the increase in this form of diabetic mortality has been proceeding at about the same rate as during the decade preceding the Great War. He grants that it is difficult to decide to what extent the steady increase in deaths ascribed to diabetes in advanced ages represents a true increase in incidence of the disease and to what extent it is due to an increase in recognition of diabetes with mention of it on death certificates.

TABLE II. A COMPARISON OF THE AGE OF PATIENTS WITH DIABETES WHEN FIRST SEEN IN A GROUP OF CASES BEFORE 1906 AND IN A GROUP OF CASES TODAY

| Naunyn (before 1906) | | Evans Memorial 1936–1939 | |
|---|---|---|---|
| Age | Cases | Age | Cases |
| 0–10 | 2 | 0–10 | 0 |
| 11–20 | 7 | 11–20 | 4 |
| 21–30 | 12 | 21–30 | 6 |
| 31–40 | 20 | 31–40 | 12 |
| 41–50 | 39 | 41–50 | 21 |
| 51–60 | 29 | 51–60 | 31 |
| 61–70 | 18 | 61–70 | 26 |
| 71–80 | 0 | 71–80 | 12 |
| 81–90 | 0 | 81–90 | 1 |

One of the Evans patients, a man sixty-two years old, is a case in point. He had syphilitic aortitis, congestive heart failure, and lesions in the islands of Langerhans entirely characteristic of diabetes. He gave a history of polyuria and polydipsia. His fasting blood sugar level was between 120 and 140 mgm. per cent. Several urine samples were examined and found not to contain surgar.

Naunyn, finding no sugar in the urine, being unfamiliar with the finer histologic changes in the diabetic pancreas and without ready facilities for estimating blood sugar concentration, in all probability would have not included this case in his series. Modern knowledge and the desire for more accurate vital statistics now make it seem reasonable to make the diagnosis of diabetes in this instance. Increasing accuracy is almost certain to be one continuing factor in appearing to bring to light an increasing incidence of the disease.

Naunyn regarded diabetes as a relatively acute disease. As one reads his case reports one finds again and again at the end of many, the melancholy note, "Atemzüge etwas kürzer. Trachealrasseln. Exitus im tiefsten coma."

*Duration.*—He reports the duration of the disease, as he saw it in 141 cases selected from his

TABLE III. THE USUAL DURATION OF DIABETES BEFORE 1906

| Duration of the Disease | Cases |
|---|---|
| Up to 1 year | 42 (30%) |
| 1 to 2 years | 35 (25%) |
| 2 to 3 years | 23 (16%) |
| 3 to 4 years | 14 (10%) |
| 4 to 5 years | 5 (3%) |
| 5 to 6 years | 7 (5%) |
| 6 to 8 years | 6 (4%) |
| 8 to 10 years | 1 (1%) |
| 10 to 12 years | 6 (4%) |
| As long as 16 years | 1 (1%) |
| Longer than 31 years | 1 (1%) |
| Total | 141 |

private practice and the clinic, as shown in Table III.

The Evans experience is very different. We were continually impressed with the large number of patients whom we saw with long-standing diabetes. The duration of the disease up to the time of entry to the hospital, in those who could give an acceptable history regarding time of onset, is tabulated. Of these patients the majority are still alive and going strong.

The record case in the Evans group is Mr. M. whom I first saw in Dr. Joslin's office about twenty-five years ago. Actually, his diabetes was discovered thirty-one years ago when he was twenty-six years old. Dr. Joslin soon recognized that the diabetes was atypical for I can remember that Dr. Joslin told Mr. M. never to stay entirely sugar-free. Mr. M. has followed this advice. He now takes a little insulin each morning and does not stay entirely sugar-free. Unfortunately, he has developed angina pectoris; but he is fifty-seven years old, fairly well in spite of the handicap of diabetes for so many years, and easily is able to carry on a gainful occupation.

Naunyn would have been interested to know that within the relatively short period of thirty-five or forty years after his book was published something could have taken place to make of diabetes a relatively safe disease, to bring it about that while in his day 80 per cent of the cases lived for less than four years after they were recognized, the time was soon to come when at least 60 per cent would live for a great deal longer period than this. He would have been surprised, too, at diabetes ever becoming so tractable that no doctor would consider it at all unusual to see patients who had withstood the disease happily for ten, fifteen or twenty years or more.

**There are several reasons why long-standing cases are often encountered: better knowledge of diabetic care, earlier diagnosis, good follow-up work in out-patient clinics but especially, of course, because of insulin. None of Naunyn's cases could receive the benefit of this drug. Of the Evans cases, seventy-five (70 per cent) either were taking it regularly, had taken it before they came to the hospital, or were taught how to use it on arrival. Even the most casual injector and the patient least likely to learn dietary discretion appeared to obtain great benefit from insulin and, if accomplishing nothing more, managed far to outlive what Naunyn would have regarded as a reasonable diabetic life expectancy.**

### Causes of Death

Diabetes, however, remains a threatening disease. Of Naunyn's 131 cases, forty-nine were followed to necropsy. In 1910, when I was a Massachusetts General Hospital house pupil, we admitted forty-two cases to the medical wards during my term of service, and of these seven

TABLE IV. THE USUAL DURATION OF DIABETES IN 1940

| Duration of the Disease | Cases |
|---|---|
| Up to 1 year | 11 (12%) |
| 1 to 2 years | 7 (7%) |
| 2 to 3 years | 10 (11%) |
| 3 to 4 years | 5 (5%) |
| 4 to 5 years | 8 (8%) |
| 5 to 6 years | 5 (5%) |
| 6 to 8 years | 11 (12%) |
| 8 to 10 years | 9 (10%) |
| 10 to 12 years | 8 (8%) |
| As long as 16 years | 17 (18%) |
| 20 years | 2 (2%) |
| Longer than 30 years | 1 (1%) |

TABLE V. THE UNFORTUNATE COURSE OF VASCULAR HYPERTENSION IN DIABETES

| Date | Weight | Blood Pressure | Sugar | Urine Albumin | Sediment | Blood N.P.N. | Blood Sugar | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1–17–34 | 136 | 190–100 | s.p.t. | 0 | Negative | 34 | .14 | |
| 4–17–34 | 131 | | 5% | 0 | " | | .26 | 10 Units old Insulin. Dieting carefully. |
| 1–10–35 | 132 | 200–100 | s.p.t. | 0 | " | | .16 | |
| 6–24–35 | 133 | 200–100 | v.s.t. | 0 | " | | .16 | |
| 12–23–35 | 131 | 225–120 | 0 | 0 | " | | .14 | Shocked badly by recent sudden death of daughter. |
| 8– 9–37 | 135 | | 1% | 0 | rare granular cast | 28 | .26 | Suddenly developed Bell's Palsy. |
| 11–19–37 | 135 | 240–120 | 1.7% | 0 | | 31 | .30 | Now has shifted to Zinc-Protamine Insulin. Says she is sugar-free "most of the time." |
| 4–14–38 | 131 | 240–110 | 3.1% | 0 | rare red cell | 35 | .31 | Likes Zinc-Protamine Insulin but does not stay sugar-free. Dose increased. |
| 9–14–38 | 134 | 230–120 | t. | f.p.t. | Negative | 37 | .37 | Feeling very well. Does not stay sugar-free. Feels "weak" if she takes more Insulin. |
| 4–22–39 | Suddenly collapsed and died of what appeared clinically to be cardiac infarction. | | | | | | | |

(17 per cent) died before much time had elapsed. In those days, for a diabetic to enter a hospital was likely to be dangerous. While the immediate mortality of the treatment of diabetes in hospitals now has become negligible, yet diabetics do not live indefinitely. It was somewhat disconcerting to realize, as we followed up the Evans cases, that of the 113 patients who were studied between 1936 and 1939, fifteen already are known to be dead. Naunyn, however, saw a different cause of death than did we. In his forty-nine necropsied cases, fifteen (31 per cent) died in coma, sixteen (33 per cent) had tuberculosis—at times, to be sure, complicated by coma—and only nine (18 per cent) appeared to have significant vascular disease. Of our fifteen fatalities, one (7 per cent) died in coma, and eleven (73 per cent) died as the direct result of some vascular complication. Certainly, vascular disease, instead of coma or tuberculosis, has become the diabetic's bugbear. Whether one studies diabetes with the pathologist or during life, as did Friedman,[3] the incidence in long-standing cases of a profound degree of arterial degeneration with its complications is the most unmistakable finding.

Mrs. S. was first recognized to have diabetes in 1932, when she was forty-one years old. In 1934, she weighed 136 pounds but had a blood pressure of 190/100. She took small doses of insulin or protamine zinc insulin regularly. In 1937, she developed a Bell's Palsy which cleared up slowly, and after this her diabetes seemed less easily controlled. However, she appeared to feel perfectly well. In 1939, she went downtown one day, suddenly collapsed, and died shortly—apparently of cardiac infarction. Could anything have been done to prevent the development of her vascular disease or to postpone the final accident?

Vascular disease in all its forms, with or without hypertension, with or without gangrene, with or without nephritis or cerebral apoplexy, is seen so frequently that its prevention or the mitigation of its course in the diabetic is highly desirable. New knowledge about arteriosclerosis is badly needed.

*Diabetic Coma.*—Naunyn would have considered it almost unthinkable to imagine that diabetic coma could become a relatively simple diabetic complication, easily amenable to treatment. Yet, actually, insulin has made this possible.

The Evans case which I should have most enjoyed demonstrating to him as typical of these times is Mrs. C., a known diabetic of seven years' standing, who twice previously had been in severe acidosis. She had been taking insulin regularly but abandoned it a week before coming to the hospital, and when she arrived Naunyn would have agreed that she presented, "Atemzüge etwas kürz. Im tiefsten coma." We were able to do quickly, as a matter of course, things that Naunyn would have

regarded as impossible; the immediate estimation of the blood sugar and $CO_2$ levels, the administration of large amounts of insulin, the continuous administration of fluids by vein and under the skin, and to give her adequate, well-trained, skillful diabetic nursing care.

*Surgery.*—Naunyn dreaded surgery in diabetes. He knew the bad side of the picture and remembered postoperative coma developing frequently after chloroform, ether or local anesthetics: so about all he had to say of diabetic surgery

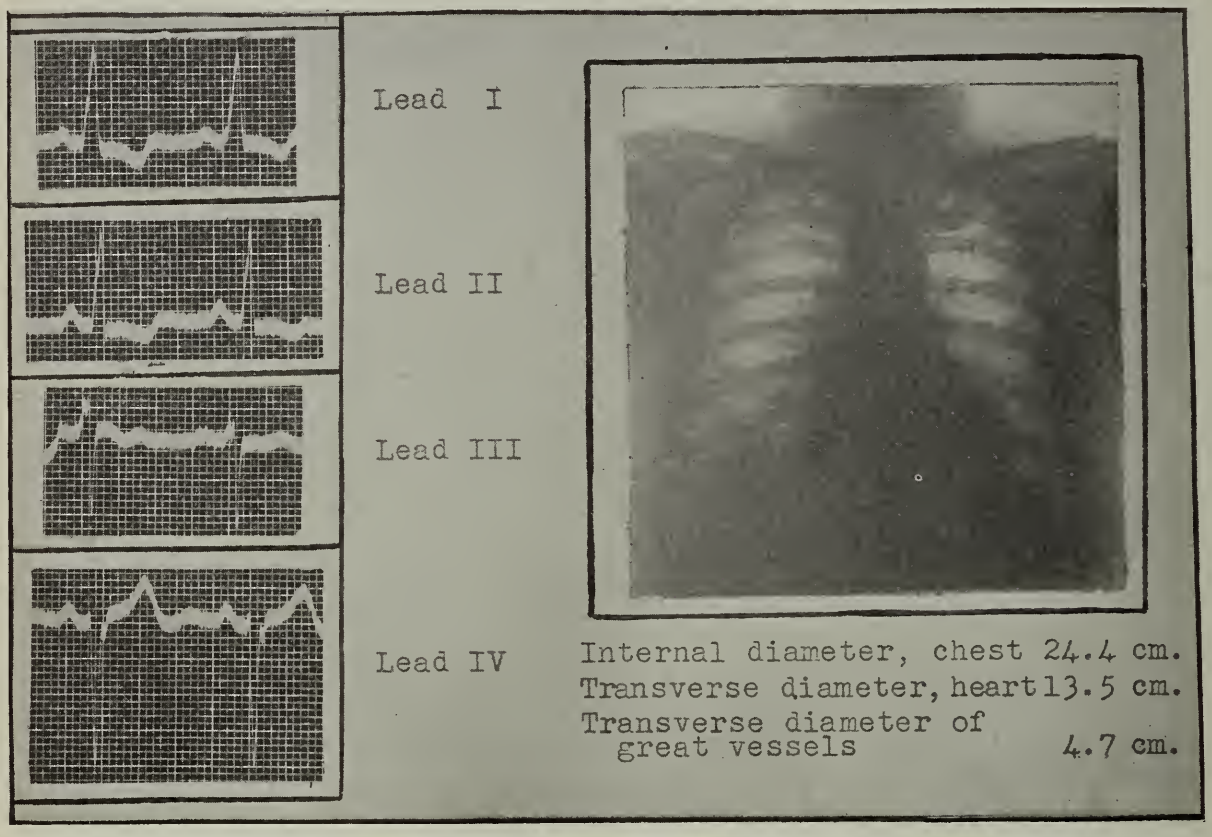



Fig. 4. Electrocardiographic tracings and chest radiograph in a fatal case of diabetes with hypertension a year before death. The heart is slightly hypertrophied. The electrocardiogram shows left ventricular preponderance, abnormal ventricular complexes, and absence of "r" in the fourth lead. Could the information derived from these findings have been used rationally to delay the final outcome?

Even though the treatment of diabetic coma is now fairly standardized, very simple, and the mortality from coma is much less, atypical cases still are encountered.

C. B., a man of sixty, was a known diabetic of twenty years' standing. Three weeks before entry to the hospital he noticed that he was becoming weak, thirsty and sleepy. Four days before entry he began to vomit and he said that this had become an almost continuous performance. On arrival the urine contained sugar, acetone, no diacetic acid, a little albumin, and rare hyaline and granular casts. He was treated as though he were about to develop coma. After recovery he was found to have as high as 52 points of hydrochloric acid in the gastric juice after an alcohol test meal. Did he have diabetic acidosis masked by a relative alkalosis that came from vomiting off hydrochloric acid, or did he have something entirely different?

was to avoid it if possible; if impossible, to protect the patient by pre-operative and postoperative dietetic care as best one could, using lots of sodium bicarbonate as a prophylactic against the acidosis which was well-nigh certain to develop. I would have liked him to have seen Mrs. A.

Mrs. A., sixty-three years old, developed diabetes nearly twenty years ago. She has had a cholecystectomy, an operation for hemorrhoids, the repair of a ventral hernia, and an emergency operation to unravel a strangulated femoral hernia during her diabetic lifetime, all under ether anesthesia. She now goes serenely about her business, a regular taker of insulin, and with vascular hypertension.

Certainly, diabetic surgery is now very different than it was in Naunyn's day. Diabetics withstand surgery about as well as anyone.

*Inheritance Factors.*—Naunyn believed that diabetes was due to an inherited liability to the disease which was brought to life by factors the exact nature of which were not clearly defined. From the point of view of knowing exactly what causes diabetes, we are little further ahead than we used to be. There is no doubt, however, that the diabetic tendency runs through families and that there is a relationship between diabetes and obesity. For the sake of bringing out these points, the family histories of 126 non-diabetic cases, as taken routinely in the Evans Memorial, were compared with the family histories of ninety-six diabetics. Adequate histories in the remainder of the diabetic group were not satisfactorily obtainable because of language difficulties.

TABLE VI. THE MODERN TREATMENT OF DIABETIC COMA

| Date | Time | Blood $CO_2$ vols. % | Blood Sugar mgm. % | |
|---|---|---|---|---|
| July 19 | 5 p.m. | 10 | 800+ | 50 Units Insulin |
| | 6 | | | 50 Units Insulin |
| | 8:30 | | | 30 Units Insulin |
| | | | | 30 Units Zinc-Protamine |
| | 10 | 11.7 | 425 | 20 Units Insulin |
| | 12 | | | 20 Units Insulin |
| July 20 | 2 a.m. | | | 20 Units Insulin |
| | 4 a.m. | | | 20 Units Insulin |
| | 6 a.m. | | | 20 Units Insulin |
| | 7 a.m. | 35 | 200 | |

Patient received from 5 p.m. until 6 a.m. 1,000 c.c. of saline by vein and 2,000 c.c. subcutaneously. She was conscious and comfortable. From then on it was plain sailing.

TABLE VII. LABORATORY FINDINGS IN AN ATYPICAL CASE OF DIABETIC ACIDOSIS

| Date | Blood | | | |
|---|---|---|---|---|
| | N.P.N. mgm. % | Sugar mgm. % | $CO_2$ vols. % | NaCl mgm. % |
| April 21 | 75 | 400 | 57 | 443 |
| 22 | 71 | 364 | | 433 |
| 24 | 50 | 266 | 68 | |
| 26 | 39 | 172 | | |
| 28 | 36 | 168 | | 486 |
| May 1 | 35 | 154 | | 493 |
| 11 | 30 | 158 | 63 | 593 |

This small group of cases ran true to form. The diabetic familial tendency was much more noticeable among the diabetics than among the non-diabetic group.

*Obesity.*—The factor of obesity as a possible precursor to diabetes was even more clearly apparent.

TABLE VIII. A COMPARISON OF FAMILY HISTORIES IN A GROUP OF UNSELECTED NON-DIABETIC AND DIABETIC PATIENTS

| 126 Non-diabetic Patients | 96 Diabetic Patients. |
|---|---|
| None had diabetic fathers (0%) | 4 had diabetic fathers (4%) |
| 6 had diabetic mothers (5%) | 6 had diabetic mothers (6%) |
| 1 had a diabetic brother (1%) | 4 had diabetic brothers (4%) |
| 6 had diabetic sisters (5%) | 9 had diabetic sisters (9%) |
| 1 had a diabetic child (1%) | 3 had diabetic children (3%) |

### New Problems

The fundamental differences, boiled down, between diabetes as Naunyn saw it and as it appears today are in the sex and age distribution of the patients and in the duration of the disease. The gravity of diabetic coma or of tuberculosis as a complication of diabetes is much less. The surgical aspects of diabetes are no longer hazardous. Fatal diabetes no longer occurs regularly in young people. Because diabetes and longevity are now compatible, the modern doctor is faced with a variety of new diabetic problems which Naunyn did not foresee. Of these, by all odds the most important is the management of vascular disease, and probably the next most important is the early recognition of cancer.

Mr. W. was seventy-two years old when he entered the Evans Memorial in January. Three years previously it was discovered that he had diabetes. He came to the hospital because of a painful, swollen foot, the result of cutting a toenail. The only untoward symptom of which he complained while he was in the hospital was of an attack of diarrhea lasting for several days. Ordinarily, he said, his bowels were constipated and to have diarrhea surprised him. The stools did not contain fresh or occult blood. Rectal examination revealed a symmetrically enlarged prostate with nothing else. He remained under cover for three weeks. Two months later he reëntered, now with a hard, irregular, inoperable cancer surrounding the rectum. He died within seven months after we first saw him.

Naunyn was a rare student of diabetes and paved the way for modern treatment. Banting and Best added insulin. The modern doctor must learn to prescribe insulin wisely since the vast majority of diabetics, even the mild cases, are benefited by its use. He must also be guided by Naunyn and study his cases as individuals as carefully as did that wise old clinician.

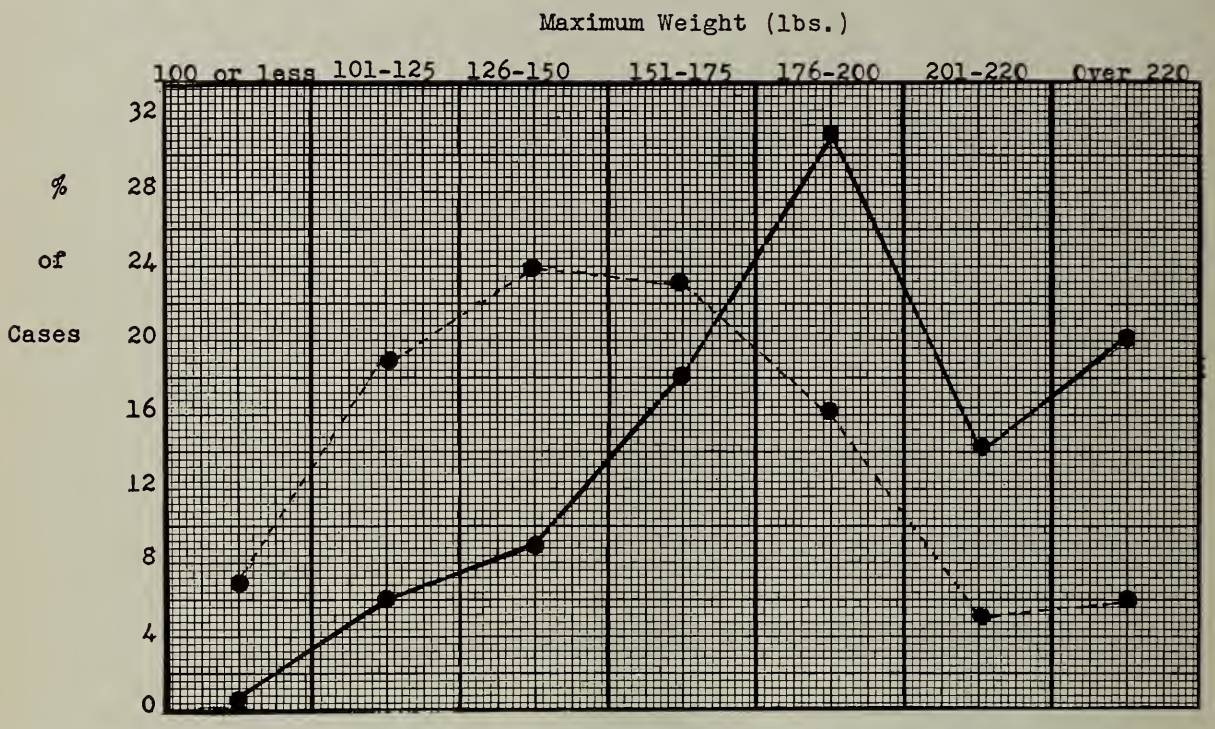



Fig. 5. The factor of obesity as a precursor of diabetes. The dotted line represents the maximum weight of 126 unselected non-diabetic patients: the solid line the maximum weight of 114 diabetics. Persons at one time notably overweight were encountered among the diabetics with much greater frequency than among the non-diabetics.

*Periodic Examination.*—Because of insulin diabetic patients will live to be observed for long periods of time. If there is any field in internal medicine where periodic health examinations are important it is in the management of diabetes. Diabetic patients must be reëxamined again and again: to focus too much interest on diabetes—on blood and urine sugar analyses alone—is now unsound. The complications of diabetes have become the important feature of the disease rather than the disease itself. By recognizing complications early—surgical complications, vascular complications or the early stages of diseases like cancer which may develop in the diabetic individ-

ual entirely independent of diabetes—steps may be taken to practice intelligent preventive medicine and thus to afford the diabetic as good if not better a life expectancy than can be offered his non-diabetic friend, less likely to submit to medical checking ever so regularly.

### The Specialist in Diabetes

The physician who thinks of specializing in diabetes is tempted to become a medical menace. For diabetes is not a specialty. The doctor best fitted to give diabetic patients most satisfactory supervision will be like Naunyn: a broad-gauged clinician interested in all aspects of medicine, up-to-date in all fields, a keen student, a hard worker, and regarding diabetes not as a narrow subject but as a disease presenting such variegated problems as to include the whole scope of medicine and surgery.

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### Third Annual Fracture Day

The third annual Fracture Day program, sponsored by the Flint Regional Fracture Committee and the Genesee County Medical Society, will be held at the Hurley Hospital, Flint, Michigan, May 21, 1941.

The program will include the following papers:

*Morning Session*

Evaluation of Internal Fixation of Hip.....Dr. H. B. Elliott
Plaster Paris Technique.....Dr. J. H. Curtin
Pitfalls in X-ray Diagnosis.....Dr. R. B. MacDuff
Fractures of the Spine.....Dr. R. W. MacGregor
Fractures of the Maxilla.....Dr. F. C. Thorold
12:00 Noon .....Luncheon at Hospital

*Afternoon Session*

Internal Two-Plane Fixation of Fractures of Long Bone .....Dr. G. J. Curry
The Radiologist in Relation to the Physician..Dr. L. M. Bogart
Fractures of the Shoulder Region.....Dr. D. R. Brasie
Osteoporosis and Osteogenesis.....Dr. J. Livesay
Low Back Pain.....Dr. O. J. Preston

A round table discussion will follow the presentation of papers.

# Urethral Diverticula and Cul-de-sacs


By Noah E. Aronstam, M.D.
Detroit, Michigan

Noah E. Aronstam
*M.D., Michigan College of Medicine, 1898. Member, Society for Investigative Dermatology. Member of the Michigan State Medical Society.*


■ Urethral diverticula and cul-de-sacs are anomalies of development and are by no means so rare as some authorities would lead us to believe. The literature on this subject is, unfortunately, meager and the little information one does gain on reading it is very inadequate, so that one is tempted to regard these defects at best as but extremely infrequent ones affecting the urethral mucosa. Genito-urinary surgeons of vast experience have treated the subject in a very perfunctory manner and have paid but little attention to it in textbooks or otherwise. The reason why these urethral malformations are not oftener encountered may be explained by the fact that they give rise to no inconvenience in the patient under normal conditions, and are only accidentally discovered while examining the urethra for some other malady. Finding nothing of interest recorded in the literature, I have relied solely upon my own resources in the elaboration and description of the subject designated by the title. This article is largely based upon a number of cases witnessed by me in my private practice.

### Varieties

There are two forms of these urethral peculiarities, viz.: (1) the *diverticulum,* a short linear, narrow, collapsible pocket opening into the urethral canal, from two to three centimeters in length, of the caliber of a knitting needle, unyielding and nondilatable; and (2) the *cul-de-sac* proper, a larger, longer and more distended pouch stopping abruptly or rather terminating blindly in the mucous lining of the urethra, seldom exceeding three centimeters in length and somewhat larger than the preceding one in caliber. Both of these varieties are congenital anomalies, rarely found further down than the first two inches of the anterior urethra and are in most instances situated on the floor of the canal, thus distinguishing them from enlarged and patulous urethral

follicles that are commonly located on the roof of the urethra, in proximity to the fossa navicularis.

### Embryology

Of interest to the histologist is the embryologic phase of these small developmental errors. The only plausible theory the author is able to venture regarding their embryonic evolution, is the faulty closure of that part of the genital cleft concerned in the formation of the urethral tract synchronous with faulty or delayed participation in the development of the epiblast lining it. Instead of the embryonic units uniting and blending at the proper period, they undergo a process of interrupted or mal-development and eventuate into the above-mentioned abnormalities of the urethral wall. As remarked before, they are only accidentally detected by means of the urethroscope or as a result of urethral instrumentation in the form of sounds or similar instruments employed for therapeutic or diagnostic purposes. They are apt to engage the point of the advancing instrument, and if the operator still persists on meeting these obstacles in forcibly propelling the sound, he may not infrequently lacerate or even perforate the blind extremity and thus establish a channel of communication between the cul-de-sac and the urethral canal.

### Symptoms and Complications

These anomalies give rise to little discomfort, but when once the seat of inflammatory involvement they may prove annoying and exceedingly rebellious to treatment, unless they are radically attacked by the method I am about to outline.

**These anomalies may occasionally produce very vague symptoms, which are apt to puzzle the physician. They may, for example, simulate a mild case of urethritis, while the history and accompanying symptoms do not at all warrant such a diagnosis. They are, moreover, the cause of many a case of prolonged urethral discharge, a "urethrorrhea" as it is termed by some, while microscopic examination reveals nothing of importance that could furnish a clue to the existing pathological state. Among other symptoms occasioned by them in a number of instances, painful micturition and urinary tenesmus may be pointed out.**

Should they become implicated in a gonococcic process, concomitantly invading other portions of the urethral tract, they may form the starting point for strictures of various kinds, particularly that of the longitudinal or bandlike type; they may also prove a prolific source of protracted suppuration, which is persistent and stubborn and does not seem to yield to the most painstaking and thorough treatment, until the real cause of the malady is perchance discovered. The urinary stream in these cases of urethral diverticula is irregular, either radiating and bifurcating, or thinly rotating and spurting, necessitating some effort on the part of the patient to expel it. This is falsely attributed to the presence of a stricture and erroneously treated for it. Should the sound, which is chiefly used for the latter condition, happen to be of small size it may promptly engage in the opening of the pouch or diverticulum and refuse to advance, when the exact nature of the lesion may be readily ascertained. Other symptoms may be detailed, but the above are the main ones demanding our attention.

### Treatment

The treatment of these urethral defects is decidedly simple. It consists in first discovering the precise location of the sac or canaliculus by means of the urethroscope. With the urethroscope in situ, the lacunar fold is then slit open with a small knife or tenotome throughout its entire extent to the very bottom of the urethral mucosa. Or, after the site of the channel or sac has been located, a urethrotome may be introduced and by a sweep of the delicate blade, the pocket divided. Local anesthesia usually suffices to accomplish this result. As soon as the fold of mucous membrane has been severed, this should be immediately followed by the insertion of sounds in ascending sizes until the largest can be conveniently passed, and left in situ for at least ten minutes each time. This must be continued for a week or ten days to prevent the too premature closure or healing of the divided edges or subsequent fibrous contraction, which may ultimately lead to stricture formation. The two lateral bands become atrophied and at a level of the urethral canal. Rarely is the fold of mucous membrane so extensive or overlapping as to require ablation or removal in toto. Another method that may be utilized is to dilate the urethra either with a urethral dilator or what is still simpler, with a pair of ordinary dressing

forceps gently introduced and expanded to its utmost limit—provided, however, that the cul-de-sac is not situated too far posteriorly—severing the band of the pocket by means of a very small scissors and then proceeding in the manner delineated above.

### Conclusions

In all cases of chronic urethral discharge without any appreciable or assignable cause as a basis, one must always be on the lookout for these annoying little anomalies and institute a thorough investigation for their possible presence.

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# Factors in Maternal Health

## Hospitals and Staff Groups*

By S. A. Cosgrove, M.D., F.A.C.S.
Jersey City, New Jersey

Samuel A. Cosgrove, M. D.
*M.D., Cornell University Medical College, 1907; Clinical Professor of Obstetrics, Faculty of Medicine, Columbia University; Medical Director and Attending Obstetrician Margaret Hague Maternity Hospital; Attending Obstetrician Jersey City Medical Center; Consulting Obstetrician Christ Hospital, Jersey City; Bayonne Hospital, Bayonne; North Hudson Hospital, Weehawken; Holy Name Hospital, Teaneck; Mountainside Hospital, Montclair; Monmouth Memorial Hospital, Long Branch; Diplomate American Board of Obstetrics and Gynecology; Fellow American College of Surgeons; American Association of Obstetrics, Gynecology and Abdominal Surgery; American Gynecological Society; New York Obstetrical Society; New York Academy of Medicine, et cetera.*

■ The subject of maternal health is a most protean one, embracing much more than the health of individual mothers and prospective mothers. It connotes the broadest implications of the inter-relationship between the health of mothers as individuals and the welfare of their children, their husbands, the family structure and the economic and sociologic relation of family groups to the community. This relationship is reciprocal between the individual and the broader fields to which I have alluded. Thus, while poverty and lack of educational advantages may very directly influence the health of women as individuals, just so surely may poor health in the mother, as the center of the family unit, result in lack of educational and economic advantages for her children. Ill health on the part of the mother reacts disadvantageously on her environment and on other individuals in her orbit just as surely as unfavorable environment contributes to poor health in the individual.

It is thus very evident that it is quite impossible to examine and discuss all these multifarious relationships in a brief talk. Rather, many individuals must contribute thought, each in relation to his own phase of this manifold subject. Therefore, it would seem to me proper to discuss hospitals and doctors as the one phase most familiar to me, and probably to most of the rest of us here.

### Service to Public

One quite naturally perhaps, first thinks of the hospital in terms of its service directly to the physical health of individuals. This has been and must continue to be the primary channel through which hospitals serve society. It no longer, however, by any means, remains the only channel of such service, nor the hospital's only obligation. The concept of the service of hospitals to the community has broadened commensurately with the broadening of the concept of the relation of ill health through the individual outward to the whole of society. Thus, the hospital of today must administer not only to the physical needs and welfare of its clients, but must contribute actively and effectively to the amelioration of the economic and sociologic handicaps under which that clientele exists, and perhaps most importantly of all to the education of everyone concerned with the health program, not only those for whose benefit that program is inaugurated and carried on, but in relation to every individual who in any sense contributes to that program by thought, energy and skill. For it has been well said that if the whole broad effort toward bettering maternal health could be epitomized in one word, that word would be "education." Therefore, the hospital which undertakes, no matter how effectively, to care for the physical needs only of its clients, and fails to undertake the education of those clients, and of the hospital administrators and doctors and nurses and social workers, it is but doing a poor half of the complete job which it might be and should be accomplishing.

The whole program contributing to maternal health is in its theoretical set-up, well known to all of you. The agenda and standards established

*Presented at the Annual Meeting of the Michigan State Medical Society, Detroit, September 27, 1940.

by the Federal and State Bureaus of Maternal and Child Welfare, the American Medical Association, the American College of Surgeons, the American Hospital Association, the American Committee on Maternal Welfare and many others furnish on the whole, not only sufficiently broad and complete programs, but also adequately and specifically worked out technical detail. Hospitals have therein an undeniably important, indeed a potentially central and commanding place. This at once imposes on hospitals, and on hospital staffs, not only the obligation of measuring up to the high potentiality thus accorded them, but an opportunity by so doing, of contributing to community and social betterment in a manner and to a degree tremendously more significant than that which could possibly arise out of a concept of their possibilities for service restricted to the merely physical necessities of their clients.

For them to develop to its fullest extent this glorious opportunity, however, every member of every hospital staff must have a clear and splendid vision thereof. Lest some may not have, I would invite your attention to a fairly broad plan according to which hospitals and hospital staffs may contribute to the complete social effort in behalf of better maternal health, and point out to you where, in my opinion, it is probably necessary to place especial emphasis in order that the contribution of hospitals thereto may be, as nearly as possible, complete and perfect.

## Plan for Service

*Physical Equipment.*—Every hospital undertaking the responsibility of caring for maternity cases must first of all look to its physical equipment which must at least measure up to the minimum standard of the American College already familiar to you. The plant should be so arranged as to permit the physical segregation of maternity cases from all other groups of patients. Separate labor rooms, delivery rooms and operating rooms for maternity patients should be provided and adequately equipped. Separate nurseries for the newborns must be provided and special attention should be given to the facilities for the care of the premature newborn. Laboratory facilities and service must be adequate to care not only for the routine but for the emergent demands necessary to meet obstetric catastrophe day or night.

*Staff Organization.*—The staff should be organized so that there is a separate obstetric staff headed by the best qualified obstetrician available. In him should be vested the responsibility for, and authority over, all the obstetric work done in the hospital, including the private service. Ideally in addition to professional competence he must possess much strength of character and no little diplomacy. If such a man may not readily be found on the hospital staff then he should be imported, or developed, if necessary, with the assistance of available local consultants from outside the staff, or of nearby universities, state departments of health, or other agencies. A most important part of his responsibility is to set up standards of technic and principles of management for that particular hospital. There are abundant models for such standards and principles in material already published. These present enough variety in detail to be applicable to the peculiar needs of any hospital. But it is frequently advisable to conform in general outlines to established practices in convenient areas, as is done in some states, for instance, under the leadership of the State Medical Societies.

**These standards and principles having been set up and properly published, the obstetric chief of staff must see to it without flinching from his sometimes difficult duty that EVERYONE delivering women in the hospital is rigidly required to conform thereto.**

Herein his authority must have the unequivocal backing of the hospital administrative board and executive officers. While we are assured by spokesmen for hospital administrators that the latter are awake to the need for protecting the welfare of obstetric patients, it is to be feared that this awareness is not universal. In hospitals in which it does not exist, the hospital staff must try to establish and strengthen it.

Important in the management set-up is the requirement for competent consultation before any cesarean section or other artificial delivery procedure is undertaken. This means, of course, consultation with one or more competent obstetricians. But if progress in staff organization and training has made that impossible, the consultation should still be *obstetrically* competent. For if dependence must be upon general surgeons, for God's sake let their conscience be so

quickened that they cease to think of cesarean section as a routine procedure of utmost surgical simplicity. Let them rather be as anxious to acquaint themselves with the variety of newer technics for the operation as they undoubtedly are ready to follow the newer developments of gastric surgery. Let them be as well founded in their knowledge of the indications and contra-indications for each as they are familiar with the application of various technics of limb amputations. If a man undertakes to do obstetric surgery, let him at least learn something about obstetrics in the same sense as he would have to learn something about thyroid disease in order to properly perform thyroid surgery.

### Hemorrhagic Emergencies

Another important set of regulations concerns the routine safeguards which must be thrown around every bleeding case. These include complete organization of material and personnel to handle hemorrhagic emergencies as follows:

**Every bleeding case should be considered as potentially in extremis and treated on this basis.**

Treatment should be first prophylactic. While many types of bleeding are accidental and cannot be anticipated, some of the most serious types would appear to depend upon, or occur in association with toxemias, especially of the hypertensive and nephritic varieties. This fact implies the opportunity of guarding against them by proper prophylaxis of the underlying or associated toxemic states. The more effective the prophylaxis of toxemias, embodied in close prenatal supervision, and the radical management of rapidly progressive cases can be made, the better the patient is protected against hemorrhage.

A further detail of prophylaxis is the routine blood grouping of all antenatal patients at the earliest opportunity in order to anticipate the need for it after bleeding occurs, when time is precious. Such routine blood grouping will eventually be considered as much a part of competent prenatal observation as urinalysis and blood pressure readings.

Prenatal patients should be taught the serious significance of all bleeding of pregnancy. Prompt report must be made of its occurrence. Patients and family must coöperate in accepting bed rest, hospitalization and other anticipatory and active treatment.

The final and most important factor of prophylaxis is the organization of policy, personnel and equipment to handle hemorrhagic emergencies in the quickest and most efficient way. Any institution upon which devolves the care and treatment of pregnancy and parturition must possess such an organization to fulfill that responsibility. Day and night someone must be instantly available with authority to put the plan of treatment into immediate operation. Twenty-four hours of every day laboratory personnel and equipment should be available for grouping and cross matching of bloods without loss of time.

Equipment and supplies for venoclysis and blood transfusion should be provided and prepared so as to make their use available as rapidly as is consistent with technical safety. Medical and nursing personnel familiar with their use and competent to employ them should be constantly on duty or subject to instant call. Arrangements should exist permitting prompt call upon a known source of available donors. Funds must be made available to buy blood if and when necessary. No patient should die for lack of a fifty dollar bill.

**There is no detail of this apparently formidable, but really simple, organization which cannot be provided in the smallest and poorest hospital if someone will only see that it is provided. The largest and most elaborate hospital cannot afford to neglect its provision.**

### Forceps Deliveries

The next item of regulation must be the supervision of all forceps deliveries, because dependent upon such competent supervision, the use of the obstetric forceps may differ as between wantonly murderous butchery and life-saving art.

**It does not suffice, in this connection, merely to have written rules that for instance Group A of the staff may do difficult forceps operations, but that Group B of the staff may do only "low" forceps operations.**

For the members of Group B, whose privilege and responsibility it is desired to limit, are the very individuals who are least able to distinguish between dangerously difficult procedures and in-

nocuously easy ones. They are least able to evaluate indications and conditions. Therefore, to supplement established rules, actual knowledge of each situation must be available to the responsible director and he must give or withhold permission in each case, and in relation to each operator, unless he knows enough of the latter's capacity to accord him carte blanche.

### Standards of Technic

Next must be established standards of technic for medical and nursing procedure in the labor rooms and the delivery rooms to which all operators and other personnel must be required to religiously adhere.

Nor will the mere establishment on paper of such standards as I have indicated be adequate to produce good results. Those responsible for them must be imbued with the deepest sense of the necessity of their conscientious execution. And machinery must be provided for insuring that their execution is enforced on those individuals not sharing the proper sense of their necessity and desirability. The best such machinery on any except the very smallest services are well trained obstetric residents, capable of accurate observation, dependable evaluation of situations, and invested with definite authority as representing the service chief or chiefs. Such individuals are invaluable coördinating links between those possessing responsible authority and those carrying out the actual procedures of obstetric practice, in no matter what capacity and in relation both to ward material and their own private patients.

Here I wish to emphasize that there should be no essential distinction between public ward cases and private patients. The hospital owes the same duty to each. A private patient is just as much entitled to have adequate safeguards thrown about her by the hospital as is the ward patient, even though she has selected voluntarily a particular practitioner as her private attendant. The hospital must see to it that he renders to her a service not less than it insists be rendered to non-private patients. If the profession is to properly coöperate in safeguarding maternal welfare in the highest possible degree, *all* doctors must be made to realize the importance of service standards directed to that objective. I am a private practitioner myself, deriving far the larger part of my income from private practice; I have just as strong individualistic tendencies and just as great jealousy for my prerogatives in relation to my patients as any practitioner can have. Yet I believe with the strongest conviction that the zealously guarded relationship between doctor and private patient is in the last analysis of less importance than the responsibility of society, through the hospital, to insure that every pregnant woman receives in parturition the very best service that careful consideration and thorough organization by responsible and qualified agencies can supply.

Furthermore, I am confident that in accepting that attitude and conscientiously conforming to properly thought out and established standards of practice the individual practitioner will in the long run be conscious of better service to his patients and greater satisfaction in that service to them than if he insists on maintaining the traditional attitude of untrammelled responsibility for and uncontrolled discretion in handling his private work.

**The inauguration and prosecution of such a program will undoubtedly entail much bitterness, jealousy and misunderstanding at first. Ideal relationships cannot be accomplished over night. Much continuous patient effort will be required, much grief and opposition may frequently have to be overcome, before it is accomplished. But accomplished it must be in every hospital and by every staff before each can proudly say, "We are accomplishing our job in the very best possible way for the safety of our mothers and babies."**

### Prenatal Care

The program thus outlined for safeguarding mothers and their babies in actual parturition must now be extended to include the means of safeguarding them in pregnancy and the puerperal period after their discharge from the hospital. Prenatal clinics are just as essential a part of the hospital's contribution to maternal health as is proper provision for the care of the woman in labor. That this is so requires but little evidence. Heaton states that it is a consensus of both British and American authorities that efficient prenatal care would reduce maternal mortality fifty per cent. Bierman says that at least half of the annual loss of twelve thousand mothers directly due to pregnancy is needless, and that every

year that well organized programs for supplying good prenatal and postnatal care and skilled obstetric care and delivery continues will give us additional proof that many of these lives can be saved.

**Quigley says that as a result of a nation-wide coördinated effort between public health agencies, hospitals, and private physicians, there has been a very significant decline in the maternal death rate for the whole country.**

Between 1930 and 1936 this decrease amounted to 15 per cent. Between 1936 and 1938 there was a further decrease of 24 per cent. In ten years, from 1928 to 1937, there was a reduction of 50 per cent in some of our larger cities. New York, Connecticut, New Jersey, and Pennsylvania, in periods of from four to nine years ending in 1938, showed an approximate average improvement of about one-third. Conversely, evidence is abundant that lack of competent prenatal care is closely associated with high maternal mortality. Thus Bingham says that in 1939, throughout the whole of New Jersey, 35 per cent of the obstetrical patients who died had little or no prenatal care. Quigley says that the greatest need for tightening up the program of adequate care for maternal health is to educate the laity to the necessity of availing themselves of existing opportunities for prenatal care. In our own clinic to the end of 1939 there were twelve deaths in 168 cases of eclampsia. Of these twelve deaths, nine had essentially no prenatal care and two more had only questionably adequate care. In other words, more than 90 per cent of our eclamptic fatalities had failed to avail themselves of facilities for prenatal care which are abundant in their community.

Postnatal clinics, while not so definitely related to immediate maternal mortality as are prenatal clinics, are nevertheless of greatest usefulness in minimizing post-parturient morbidity by follow-up check of the health of those who have exhibited toxemia in their pregnancies; they should in a certain degree protect handicapped women against the hazard of future pregnancies; and they should prevent and cure many gynecologic morbidities and sequelæ.

In connection with the prenatal and postnatal clinics the development of a field nursing service is important. The significance of the rôle of the public health nurse as a channel of the vitally important program of education of the laity is becoming more and more recognized. In this contribution the public health nurses representing the hospital should share with the nurses representing official public health agencies. In most cases it is possible and advantageous for the hospital to be the hub about which are correlated all community efforts in safeguarding maternal and infant health.

### Education of the Laity

Space and time will not permit an adequate discussion of this great need for education of the laity in respect to the vital importance of early and consistent prenatal care. Every commentator on the conservation of maternal health recognizes this phase as of the utmost importance. But it has so far constituted the weakest link in all programs for maternal health betterment and must in the future command the constant patient effort of all interested workers to strengthen. Quigley says that it is "above all" important in the broad educational program which must go hand in hand with technical programs for the protection of maternal health. He suggests the use of multifarious channels for such lay education; parent-teacher associations and other groups; education by literature, such as mothers' guides; by exhibits, such as that at the World's Fair; by radio; through physicians; through public health nurses; through organized effort subsidized by state and federal public health agencies. Hospitals cannot neglect to have their commanding share in this program. Quigley further says that he believes that further improvement will come chiefly in two ways, the first of which is education of women to seek prenatal care early, continued emphasis on the text, "If pregnant, see your doctor early."

In addition to the coöperative part which hospitals have toward educational programs participated in by other agencies, the hospital has a very special educational field which is solely its particular responsibility. There are several phases of this teaching activity, but I will not discuss in detail those relating to nurses, social workers, laboratory technicians, medical librarians, etc. I do, however, wish to emphasize the responsibilty of every hospital, no matter how small or where located, for active participation in the education of physicians. The size, amount of

material handled, and other circumstances will determine how broad this education effort may be in relation to each particular institution. But every hospital can and should contribute to it in some degree.

### Education of the Physician

The rôle of the hospital in the education of physicians is a continuation of, and just as important as, the rôle of the medical college in that education. The physician who serves the hospital as resident or intern has just as much right to look to the hospital for supplying this function as he has to expect it from his medical college. The responsible heads and other members of the medical staff of every hospital should recognize their responsibility in this regard and should expect to assume the rôle of teacher as inevitably and naturally as though they held appointments to organized teaching faculties. Larger hospitals, in fact, should have organized teaching faculties, while the staffs of all hospitals should just as definitely assume the responsibilty for organized teaching.

Such a teaching program should be based on a regular curricular skeleton. Appointed periods for certain parts of it should be fixed. It may well include a certain amount of formal, didactic teaching. It should be designed to provide a generous amount of practical teaching. This should include ward rounds, manikin demonstrations, informal discussions, conferences in which cases shall be reviewed, group experience analyzed, mortality thoroughly and frankly discussed. The indications for operative procedures should be carefully evaluated and expressed. Regular periods for pathological teaching and the study of pathologic material should be provided.

Under the chiefs of service, less experienced assistants should be given the opportunity of independent responsibility and constantly broadening opportunity for practical work, in order that they may be prepared to substitute for, and eventually supersede, the chiefs themselves. These younger staff men, and the residents, should share in the teaching program in order that by teaching they themselves may learn.

### Education of Interns

The assignment of interns, except in institutions so small as to make it impossible, should be on the basis of full time devoted to the obstetric division. Good work cannot be accomplished when the attention of the interns to the obstetric division shares the interest and time devoted to other work. The interns should be required to avail themselves regularly of the provided opportunities for learning. Private as well as ward material should be available as the basis of this teaching. Private attendants should be expected to be willing to discuss their cases frankly and fully with the students. The interns should be permitted to thoroughly know the background and conditions of private patients as well as public patients. They should participate in their management, both in the labor rooms and the delivery rooms. They should be permitted to make rounds on them and to share with their own attendants the interest in, and management of, their postpartum course.

**If you will permit me to quote what I have already said elsewhere, it is in relation to this opportunity for teaching that "primary responsibility touches every one of us. There is some way that we can all contribute to the education of doctors after the medical schools are through with them. We can all teach! It is enjoined on us in our Hippocratic oath. It will contribute more to us than to our students. Any individual on a hospital staff, or any staff group, can set up formal and practical teaching of interns and of residents which will repay manifold the sacrifice that it costs. . . . If by awakening the teaching conscience of all who are, or might be teachers, the entire material available for obstetric teaching were properly developed, the contribution to the competency of American practitioners would be tremendous, and the effect in better results of obstetric experience would save much unnecessary mortality and morbidity."**

### Summary

1. Hospitals exist primarily to directly conserve and restore the physical health of individuals. In a broader sense, however, they have an important part in the many-phased sociologic, economic, educational community activity bearing upon improvement of maternal health.

2. Directly concerned with the individual welfare of patients is the physical organization and facilities provided by the hospital for obstetric patients.

3. The next and possibly more important necessity for good obstetric results is proper staff organization and control. This should have the wholehearted endorsement of the management, and rigid support of the executives, of the institution.

4. As part of this staff organization, standards of technics and principles of management should be established. They should include:

a. Requirement for competent consultation before the employment of any artificial delivery procedure;

b. Adequate safeguards for bleeding cases;

c. Special control of forceps operations;

d. Establishment of technical routines in labor and delivery rooms.

5. Establishment of such standards and principles must be implemented by necessary machinery and authority for their enforcement. They must be enforced in relation to private patients as well as to public patients.

6. Prenatal and postnatal clinics and field nursing services should be set up and operated by the hospitals.

7. Finally hospitals have a great educational responsibilty; important among the objectives of this responsibility is that of joining with other agencies in continued intensified effort to impress the laity with the importance of early prenatal care.

8. While the hospital also has the responsibility of education of nurses, and other quasi-professional personnel, its highest and specific educational function is the continuing education of physicians. This function applies to members of its own staff. Most importantly, however, it applies particularly to its interns. In relation to these men and women it supplements and continues in integral relationship their medical college training.

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# Indications for Simple and Radical Mastoid Operations*


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■ The operations on the mastoid process are prophylactic operations. Neither the inflamed mastoid process in an acute otitis nor the sclerotic mastoid process in a chronic otitis is dangerous to the life of the patient. However, in both circumstances there is danger that the infection will pass over towards the structures adjacent to the mastoid process, namely, the meninges, the sinus of the dura, and the brain. From that point the life of the patient is in danger. That is particularly true for the acute mastoiditis following an acute otitis. Consequently, it is the task of the otologist to save the meninges and the brain from becoming infected, which is possible in a great number of cases (of course not in all) since, as a rule, the infection in the mastoid process does not attack the meninges, unless it reaches a certain degree of maturity. It takes about four weeks from the onset of the acute otitis to reach that degree of maturity. A mastoiditis in that stage is often called "coalescent

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mastoiditis" and it presents a great number of definite symptoms. Therefore it should be easily recognized by the general practitioner.

### Coalescent Mastoiditis

The symptoms of the coalescent mastoiditis can be divided into: (a) General symptoms; (b) general brain symptoms; (c) local brain symptoms; (d) symptoms from the mastoid process; (e) symptoms from the auricle and from the external canal; (f) symptoms from the drum and the middle ear.

*General Symptoms.*—The mental and psychical conditions of the patient are entirely normal in adults as well as in children. The temperature in adults may rise to 101. Higher degrees of temperature point as a rule to a beginning intracranial complication unless they are due to another disease and indicate the exposure of the sinus. Chills are missing and the blood count is normal in adults as well as in infants.

*General Brain Symptoms.*—Adults frequently complain of headaches. However, the patients never point to a particular part of the skull as the seat of the headaches. The fundi of the eyes as well as the cerebrospinal fluid are normal.

*Local Brain Symptoms.*—Pareses, hemianopsia, aphasia are strictly absent.

*Symptoms from the Mastoid Process.*—

**The mastoid process nearly always shows some very important symptoms if it is examined in the proper way. I recommend the following method of examination: The physician stands behind the patient and touches gently the skin of the mastoid process on both sides. As a rule, the skin of the diseased side is warmer. After having examined the temperature of the skin the physician looks for an edema on the tip of the mastoid process. That is the most difficult part of the examination and requires some training. One has to have in mind that the outer surface of the tip of the mastoid process is covered only by periosteum and thin skin. There is no subcutaneous fat, not even in individuals with a fat neck. Consequently, the outer surface of the tip always can be felt as a clear-cut bony edge, provided the patient slowly moves his head to both sides in order to relax the contraction of the sternocleidomastoid muscle. In a mastoiditis the periosteum of the tip is infiltrated and swollen. Consequently, the tip can not be felt as a clear-cut edge, and one rather gets the impression that between the bony edge and the finger of the examiner there is edematous soft tissue which leads to the diagnosis of an edema of the tip of the mastoid process. Although it requires a certain training to become acquainted with that kind of examination, I consider the edema of the tip as the most important mastoid symptom and I believe that the number of cases of so-called latent mastoiditis would decrease considerably if otologists would always stress the proper importance of this part of examination.**

Less important is the tenderness of the mastoid process which many textbooks emphatically call the chief symptom of the mastoiditis, although the tenderness may be almost entirely missing in mastoid processes with a thick corticalis. However, if it is present one has to expect it on the tip, but not on the planum of the mastoid or in the region of the antrum. Frequently I observed otologists exerting a formidable pressure on the planum mastoideum in seeking for tenderness. There is no doubt that such a pressure hurts. It even hurts the audience. The actual tenderness can be found by exerting a gentle pressure towards the tip. In the sitting patient the pressure has to be directed upwards; in other words, from the neck towards the mastoid antrum and not from the outside towards the midline.

The x-ray picture of the mastoid process should be taken in every case where there is time to take it. However, the x-ray picture is not a *conditio sine qua non* as far as the diagnosis of the mastoiditis is concerned. Since the coalescent mastoiditis in its mature stage produces a very great number of symptoms in most of the cases, the diagnosis can also be made without an x-ray picture.

*Symptoms from the External Ear.*—It is well known that in subperiostal abscesses, which occur more frequently in infants than adults, the auricle acquires an abnormal position, viz., it is turned forwards and depressed downwards. The same position, of course less marked, can be observed in the mature coalescent mastoiditis

without subperiostal abscess. Naturally, that examination also requires trained eyes.

**Of greatest importance is the sagging of the superior and posterior wall of the external auditory canal. As a matter of fact, some otologists call this finding the chief symptom of the mastoiditis. To appreciate this symptom one has to know its pathology. The posterior and superior wall of the external canal is simultaneously the lateral and inferior walls of the mastoid antrum. In other words, if the superior and posterior wall of the external canal is perforated one enters the antrum. Consequently, the superior and posterior wall of the external canal is covered on one surface with mucous membrane of the antrum, on the other surface with the skin of the external canal. Skin and mucous membrane are connected by blood vessels which perforate the bony plate.**

Supposing there is an inflammation of the antral mucous membrane. Under these circumstances the little veins of the mucous membrane become involved by a thrombophlebitis and since some of these veins perforate the bony wall, they carry the infection from the mucous membrane into the skin producing a deeply located periostitis of the superior and posterior wall of the external canal. We call this deeply located periostitis sagging of the superior and posterior wall of the external canal. Considering these pathologic findings the appearance as well as the importance of the sagging becomes obvious. The sagging is always situated close to the drum. The skin of the sagging is white, since the inflammation is situated in the deep layers of the skin, and it is not tender to gentle touching with a probe. The sagging indicates an inflammation of the antral mucous membrane and most frequently retention of pus within the antrum. Since retention of pus accompanies every coalescent mastoiditis the sagging, consequently, indicates a mastoiditis.

*Discharge.*—The discharge in that type of mastoiditis is abundant, not fetid. The drum is red, swollen and very often shows nipple-like perforations.

## Clinical Progress

There can not be any doubt that this type of mastoiditis is clinically very well characterized and there also can not be any doubt that after having made the diagnosis the case should be operated on. However, there are instances in which the operation can not be performed for some reasons. What happens in these cases? These cases either recover spontaneously or they become subacute, but they never become chronic in adults in good general health.

*Spontaneous Recovery.*—

**That a coalescent mastoiditis may recover spontaneously, cannot be earnestly doubted. Such spontaneous recoveries occurred even in a time in which the streptococci were not menaced yet by sulfanilamide or prontosil. Nevertheless, spontaneous recoveries of completely developed, coalescent mastoiditis are not met with frequently.**

More often the acute mastoiditis turns over into a subacute mastoiditis, particularly in older individuals. Unfortunately, the importance of that type of mastoiditis is frequently not appreciated. In subacute mastoiditis one finds a decrease of clinical symptoms and an increase of danger to the life of the patient. In typical cases the symptoms of the mastoid process subside after the fourth week of the acute otitis. The tenderness of the tip of the mastoid process decreases, the discharge from the middle ear either becomes scanty or continues to be abundant, in some cases even the hearing may improve—in short, in some of these cases the otitis and mastoiditis apparently subside or at least improve. However, that improvement is only temporary and lasts about one week. The short intermission of well being comes to an end and most often in the sixth or eighth week of the otitis the disease shows its actual face and the patient, and, sometimes the physician, are terribly surprised by a fulminating complication.

Consequently, the physician must watch the patient carefully when a completely developed mastoiditis subsides or seems to subside in the fourth or fifth week of an acute otitis. That holds particularly true in older individuals. Although that improvement may be followed by an actual recovery, one has also to bear in mind that the acute mastoiditis might turn over into a subacute mastoiditis. In handling these cases the x-ray examination of the mastoid process is of great value, since it shows a continual improve-

ment in cases who are going to recover, and a continual impairment in cases who are going to become subacute.

Also a subacute mastoiditis may recover spontaneously, particularly in young individuals, although that occurrence is rarely encountered. More often the subacute mastoiditis leads to a complication when not operated on in the proper time.

*Hemorrhagic Mastoiditis.*—Up till now we have discussed only the coalescent mastoiditis, which becomes mature in a period of about four weeks. However, we know that in some cases an intracranial complication may show up without a preceding coalescent mastoiditis. That occurs particularly in young individuals with an incomplete pneumatized mastoid process. In such cases definite symptoms of a meningitis or a sinusthrombosis may appear in a very early stage of the acute otitis. According to my experience the fourth day of the acute otitis seems to be a critical day. In opening the mastoid process of these cases one finds either no pus at all or little pus; there is no or very little necrosis of bone, but there is much bleeding from the small blood vessels of the mastoid. Therefore, that kind of mastoiditis is often called "hemorrhagic mastoiditis."

*Mastoidism.*—A similar finding is met with when a well pneumatized mastoid process is operated on in the first week of an acute otitis. Alexander called these cases "mastoidism," which is different from the coalescent mastoiditis as well as from the hemorrhagic mastoiditis. It differs from the coalescent mastoiditis in the following points.

1. The mastoidism appears in the first week of an acute otitis, particularly in children, while the coalescent mastoiditis appears in the third or fourth week of an acute otitis, in children as well as in adults.

2. The mastoidism practically never produces a sagging of the superior and posterior wall of the external canal, while the coalescent mastoiditis as a rule does.

3. The mastoidism does not require an operation, while the coalescent mastoiditis does.

The mastoidism also differs from the hemorrhagic mastoiditis, since the mastoidism never is accompanied by symptoms of a beginning intracranial complication (fever of high degree, chills, rigidity of neck, et cetera). The hemorrhagic mastoiditis, as a rule, is accompanied by one or more such symptoms.

*Chronic Otitis.*—The pathological conditions in chronic otitis are quite different from those in acute otitis. In the latter the entire mastoid process is inflamed and, consequently, from every cell in the mastoid process the infection can be carried towards the meninges. In chronic otitis, particularly in these cases which require surgery, the mastoid process is sclerotic to a great extent and thus it does not harbor any danger for the meninges. The pathology in these cases is usually found only in the petrosal angle, in the antrum and especially in the middle ear. Consequently, these parts of the temporal bone are subject to the radical operation.

*Indication for Radical Operation.*—The radical mastoid operation has a relative and an absolute indication. The relative indication is found in a chronic otitis affecting the bony walls of the middle ear and treated with aseptic methods for a certain period of time without success. That statement needs some comment. At first, it emphasizes the importance of the aseptic treatment of chronic otitis. It is an old experience that antiseptic treatment (with exception of the treatment of granulations in the middle ear with alcohol) increases the discharge rather than decreases it. Consequently, we treat chronic otitis with irrigations, drainage and hydrogen peroxide only and we avoid any antiseptic treatment, even boric acid.

Furthermore, the above statement speaks concerning the treatment of a certain period of time. To make that statement more exact we have to say that a treatment of five to seven weeks is sufficient to find out whether or not the aseptic treatment will lead to a success. Success in these cases of course does not always mean to get the ear entirely dry; we rather may speak of success when the discharge definitely decreases and particularly when the discharge loses its fetor.

The relative indication is most often followed in patients between twenty to fifty years of age, particularly if they cannot afford to be under the care of a specialist for a long period of time. It is justified to follow the relative indication in these cases, since we know that suppurations of the middle ear affecting the bony walls most often

lead to an intracranial complication in people between twenty to fifty years of age. That, of course, is only true for these suppurations which are not complicated by a cholesteatoma, since the cholesteatoma of the middle ear may lead to a complication in every age of life.

**The absolute indication is found (a) when there are symptoms of an intracranial complication (b) when there are symptoms of the suppuration having passed the surgical boundaries of the middle ear.**

The first indication does not need any comment, but the second does. The surgical boundaries of the middle ear are as follows: Upward—tegmen tympani; forward—tegmen tympani and venous plexus around the carotid artery; downward—jugular bulb; backward—mastoid antrum and facial canal; mesialward—labyrinth; lateralward—external auditory canal. Each of these structures produces definite symptoms when invaded by suppuration. When the suppuration extends towards the tegmen the patient will notice headaches of neuralgiform type and slight rises of temperature. When the suppuration extends forward, symptoms from the tip of the petrous bone and sometimes even symptoms of sepsis may occur. When the suppuration extends downward (which very seldom occurs), the patient notices chills. When the suppuration extends backwards, mastoid symptoms, sometimes a facial paralysis are found. When the suppuration extends mesialward, labyrinthine symptoms occur. When the suppuration extends lateralwards, ulcerations in the mesial part of the external canal are found. These absolute indications should be followed (a) in patients who are older than sixty years, (b) in patients with a general disease as tuberculosis, diabetes, severe arteriosclerosis, etc., (c) in patients who have a deaf ear which is not suppurating. The last statement needs a comment. Supposing there is a patient who is stone deaf on the right side due to a lues or a concussion of inner ear or some other reason. If that patient has on his left side a chronic otitis with some remnants of hearing, an operation should be performed only following absolute indications. One has to keep in mind that the radical mastoid operation destroys the remnants of hearing. Consequently, in these cases one should operate only when there is imminent danger to the life of the patient.

# Sympathetic Ophthalmia*

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■ Sympathetic ophthalmia is a rare but serious disease. A typical attitude toward it is that of a prominent eastern ophthalmologist with a heavy industrial practice who told me two years ago that among 22,000 patients he had had only two cases of this disease, but that it "scared him stiff." Since no man sees this condition very often, it has been advised that all cases be reported. The purpose of this short paper is to give a brief case history, and to review the principal facts that are known today about this important type of uveitis.

## Case History

C. S., a boy of seven, on June 26, 1939, lacerated his right eye with a knife. Examination an hour later by Dr. E. P. Wilbur showed a 6 mm. corneo-scleral laceration below, with iris caught in the corneal wound and a little vitreous presenting in the 2 mm. scleral portion. There was a hyphemia. The boy was hospitalized, given 1500 U. of tetanus antitoxin, and treated with atropine, pad, and three 2 c.c. injections of Omnadin. Five days later iris prolapsed below and was excised. The eye promptly quieted and healed, and he was discharged on the ninth day after injury, July 6. Atropine, hot compresses and pad were continued for a month after the injury. There was then slight photophobia. About that time he began complaining of discomfort in his left or good eye. When seen five weeks after the injury, on August 5, the right eye had keratic precipitates, and the left was irritable. Both eyes were atropinized, 60 grains of sod. salicylate started daily, and 60 million typhoid antigen H given intramuscularly in two days. By the sixth week, when I first saw him, the left optic nerve had become inflamed, that eye had keratic precipitates and cells in the aqueous, and the right eye showed a more active uveitis. The boy again was hospitalized, for eighteen days, under treatment with atropine, hot compresses, salicylates and intravenous typhoid vaccine (eight injections). During this time both eyes became worse, then better. Soon after discharge, the right eye had subnormal tactile tension, eleven KP, an edematous disc with engorged retinal veins, and vision of 15/400.

*Abridged from a paper read before the Section on Ophthalmology, Michigan State Medical Society, Detroit, Mich., October 10, 1940.

The left eye had fourteen small KP, twelve cells per field, in the aqueous, a blurred disc margin nasally, slight retinal edema, normal vessels and corrected vision of 20/15. Both fundi showed peripherally a fine disseminated chorioretinitis. We have felt no doubt that this was a true sympathetic ophthalmia. Except for a slight flare-up a month later in the injured eye, healing has been complete, and the left eye is today normal except for the healed chorioretinitis. The injured eye has improved much. Vision now, a year later, is 20/100 with the right or injured eye, and 20/15 with the better or second eye.

### Definition

Sympathetic ophthalmia may be defined as a specific ocular inflammatory disease, clinically always bilateral, that affects primarily the uveal tract. With possible rare exceptions, it always follows a perforating wound of the eye, either traumatic or operative.

### Frequency

Figures on the frequency of sympathetic ophthalmia vary. Among all eye patients it is found only in a small fraction of 1 per cent. But among patients with perforating wounds it occurs in at least 1 per cent or more. It is not becoming less frequent.[10] It shows no significant variations as to sex, age or season involved. Woods[13] gives the immediately predisposing causes as follows:

| | |
|---|---|
| Penetrating wounds | 63% |
| Intra-ocular operations (about half for cataract) | 24% |
| Subconjunctival scleral rupture | 5% |
| Perforating corneal ulcer | 4% |
| Intra-ocular tumor | 3% |

### Pathology

The histological picture of sympathetic ophthalmia is an unusually uniform cellular infiltration of the uveal tract by lymphocytes and epithelioid cells, with extension to other parts of the eyeball.

### Clinical Symptoms

Usually, at the time of onset of the disease in the second or sympathizing eye, we find the first or exciting eye to be inflamed, soft, and with poor vision. It has suffered an operative or traumatic wound which has been slow to heal, and there has been inclusion of uveal or lens tissue in the wound. It has been subject to recurrent attacks of inflammation, or a low-grade uveitis. The diagnosis is based on evidence of active iritis, the most important step being careful examination with the slit lamp.

### Etiology

The etiology of sympathetic ophthalmia is not known. Much study has been done, and considerable evidence piled up in favor of several theories, but research has been handicapped because the disease has not been produced in experimental animals. No theory advanced adequately and completely explains all aspects known about the disease. We mention here the principal theories under consideration today.

*Bacteria.*—The disease resulting from an organism that gains entrance into the eye at the site of the wound, and moves to the other eye by blood or lymph stream, or via the nerves. This theory is very reasonable, and is supported by the studies of Samuels, which show that the specific infiltration usually starts at the site of the injury and spreads from there around the first eye, later to appear in the second.

*Filterable Virus.*—It has been possible in rabbits, by inoculating the optic nerves at any point with a virus, to produce a picture resembling sympathetic ophthalmia. The virus definitely travels along the optic nerves via the chiasm. But no virus specific for sympathetic ophthalmia has been proven or found, even in enucleated human eyes. And here again we can't explain the cases without a wound, unless the causative organism is endogenous.

*Allergy.*—Alan Woods and the Hopkins School have done much work on the disease from the allergy aspect. Uveal pigment is organ but not species specific. Injected into the body, antibodies will form, and the body can be made sensitive to the substance. The theory developed that sympathetic ophthalmia is an allergic reaction in an individual sensitive to uveal pigment as a result of previous trauma, or rarely to the presence of an intra-ocular melanoma. In this condition the usual antibodies are absent.

*Tuberculosis.*—Because of the histologic and clinical resemblance of sympathetic ophthalmia to tuberculous uveitis, efforts have been made to establish the common identity of the two diseases. Most important, J. Meller has recovered[7] tubercle bacilli from the blood and the eye in this

sympathetic disease. From his findings he feels that sympathetic ophthalmia is nothing but a chronic spontaneous uveitis on a tuberculous basis, instigated in the first eye by injury to a person with bacteremia, and getting to the second eye as a blood-borne metastasis.

### Diagnosis

The diagnosis is always presumptive,[10] and can never be made positively except under the microscope. There is no pathognomonic characteristic. The diagnosis never can be made from the injured eye. Because uveitis from another cause may resemble sympathetic ophthalmia, diagnosis of the latter condition is made more frequently than the disease actually occurs.

In diagnosis, the history and the time element are important. Although the condition seldom occurs in less than two weeks after the injury, 44 to 65 per cent develop within two months, and 77 to 90 per cent within the first year.

### Therapy

Prevention is the best cure. In repairing injuries, all uveal and lens tissue should be carefully removed from the wound, and the laceration covered with conjunctiva. Enucleation must be done where it is indicated and justified. This step must be taken within two or three weeks after the injury if it is to benefit, and promptly if the disease has already developed.

The problem of whether or not to enucleate an eye, either at once, or after an attempt has been made to save it, is difficult. In this connection, Samuels writes:[8]

> "Sympathetic ophthalmia is of great practical importance because on the correct judgment of the surgeon, in cases of injury, the future vision of the patient may depend. . . . This disease does not occur when the wound in the injured eye heals correctly and when the function of the eye is not interfered with. It supervenes in the uninjured eye only when the first eye shows signs of iridocyclitis as a result of traumatism. . . . If one observes, after a perforating wound, that the eye becomes soft and atrophic, that the cicatrix on the surface is retracted, that the eye is painful or sensitive to touch, and that the vision is failing, one finds in these symptoms an indication for enucleation, because such an eye has the potentiality of producing sympathetic ophthalmia."

It is felt that foreign protein injections have definite nonspecific value in the prevention of this disease. The infrequency of the disease in the last great war has been credited to the routine use of tetanus antitoxin. Benedict[1] says that the prophylactic injection of foreign proteins for the prevention and treatment of sympathetic ophthalmia has been so effective that it should be a routine procedure in every case of injury where the eye may be subject to the disease.

The treatment of the actual disease is that of uveitis, by dilating the pupil with atropine, using salicylates—as salicylic acid or aspirin in heavy doses, and foreign protein injections. According to Verhoeff, the best of these is diphtheria antitoxin, 20,000 units daily for a week, and continued daily or weekly until there is marked improvement, or the patient has an anaphylactic reaction. Typhoid vaccine and boiled milk have also stood the test of time.

### Prognosis

In general, under intensive and proper therapy, the prognosis in sympathetic ophthalmia today isn't as bad as it used to be, but in a given case no very hopeful promises can be made. The disease in children is very severe and the outcome unsatisfactory. The same is true of the disease following cataract extraction. The results vary in individual cases because the severity of the disease varies, and the time of starting and the thoroughness of therapy vary. Woods on the basis of 125 reliable cases in the literature finds that on the average the results in 51 per cent are favorable, or in 68 per cent if seen early and adequately treated. The process is drawn out, with relapses, and in that way may show activity for months or years. At least half of all cases end up with no or useless vision.

Sympathetic ophthalmia is so rare that no man sees many cases. To conquer the disease we must all pool our experience. Though each of us seldom confronts the actual condition, its severity always makes us fear its coming. I hope only that this brief résumé of the present status of the disease may stimulate thought and discussion and thereby help us all.

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## BOTULISM

"The truth is that botulism is very largely a bugbear. The word itself sounds wonderful on medical lips. Real cases are alarming enough to cause considerable noise when they appear, and so the name gains currency and is bandied about freely both by those who cannot, and those who ought to, know better. Actually botulism is a comparatively rare disease. Between 1899 and 1922, when the United States Public Health Service's report was issued, only 345 cases were reported in the whole of this country and Canada. And some of these were doubtful.

"No amount of sheer luck could have led the commercial canners virtually to eliminate botulism as a lurking peril in their products. It was a matter of hard work and indefatigable research over many decades. Preservation of food by heating and enclosing in containers—for that is practically what canning means—was discovered by a Frenchman named Nicolas Appert as long ago as the beginning of the last century. In 1841, canning was established in the United States as an industry, and since that time has been slowly but surely advancing to a state of perfection in safety. Louis Pasteur lived, worked, and died, and availment was made of his bacteriological discoveries. It was known at least why heat sterilizes, and the degrees of heat necessary to sterilize different substances were worked out and recorded. This business of sterilizing canned foods is called "processing," and nowadays any food material put out in containers by reputable canning firms is practically always properly and scientifically processed, and sterile and wholesome, and will remain so as long as the can is unopened, undamaged, and kept free from rust. If a can rusts, of course, the rust will eat into the tin and in due time it will be perforated.

"For a long time the choice of the container was one of the commercial canner's chief sources of headache. Originally glass was used—as in home canning—and Appert was wont to seal up his preserved material in jars with corks. Then the tin can was invented and two styles of container were evolved—the so-called vent-hole can and the open-top can. Of these the former, which is closed with solder, is the earlier type, and its use has now been practically abandoned for everything except certain meats and evaporated milk. The open-top can, now generally used, is covered after the filling is done and is immediately sealed with a kind of cement. Sometimes a paper gasket is also introduced to make the can air-tight, and, where rusting is likely, the cans are enameled on the outside. The paper lining we find in tins containing crab and other sea food is there simply to prevent discoloration through contact with the metal. The shellac coating of the inner surface of some cans is applied in order to prevent the very kind of blackening (which was mentioned in the Monahan case).

"In older days, when the art of canning was not so far advanced as it is now, the pressure and temperature to which a large can was subjected would sometimes cause the seam to open slightly, and if this condition went unnoticed the contents of the can would be invaded by bacteria and would in time undergo spoiling. When such a leak occurs the can, after processing, will show little drops of moisture at the site of the leak. This is called "sweating." Nowadays every can is inspected for "sweating," and if it is present the can is tightened and reprocessed, or eliminated. Besides, containers are now more strongly made than formerly; so this possible source of contamination has all but vanished in reputable canneries. Two other ways, and two alone, remain by which commercially preserved food may reach the consumer's table in a decomposing condition. The first is through the canning of food already spoiled. But this is most unlikely if the can is put out by an established firm, since packers simply cannot afford to put out under their label, material which is not above suspicion. The second is through underprocessing in which some of the bacteria escape destruction. This possibility still exists of course, and "blown" cans are sometimes seen.

"So far as poisoning is concerned, decomposition must be fairly far advanced before the contents of a can becomes toxic. In the last fifteen years I have investigated countless charges against the companies. Yet in all that time I have not encountered an authentic case of poisoning of any kind traced to commercially canned food; and I have yet to hear of one, although the contents of millions of cans is consumed daily throughout these United States."—*The Poison Trail* by William F. Boos, M.D.

## THE FIRST ESSENTIAL

### An Authorized Code of Conduct

On Friday, April 4, a Federal Jury in Washington, D. C., found the American Medical Association guilty of "a criminal conspiracy to restrain trade."

The Jury exonerated five officials of the A.M.A. and fourteen distinguished physicians of the District of Columbia.

Practically, this verdict is without precedent and ultimately, it may vitally affect every practicing physician in the United States. It is essential to the continued effectiveness of American Medicine that physicians—every physician—understand and be concerned about the verdict of this jury and the meaning and implication of the issues involved in this unprecedented prosecution.

In effect, the Federal Jury found that:

Organized medicine had entered into a conspiracy—a criminal conspiracy—but that there were no conspirators;

A crime had been committed—but that there were no criminals;

Trade had been unlawfully restrained—but that there were none responsible for the restraint.

As far as a settlement of the issues is concerned, the verdict is without sense or substance or meaning. However, as the trial progressed and the evidence was presented by the attorneys for the prosecution, the issues were clarified and defined and the purpose and objectives of the prosecution became apparent. The attainment of these objectives would destroy the structure and pattern of medical service as it has been known and accepted in the United States.

Tediously, step by step, over a period of more than a century, American Medicine evolved and established codes and principles which governed the providing of medical service.

In the establishment of the principles, no legal authority was involved. There has been no compulsion in the controls. They were voluntary. They became operative and effective because they answered a need and worked successfully.—From "The Two Essentials for American Medicine," National Physicians Committee.

# Michigan State Medical Society
# Roster 1941

[An asterisk (*) preceding a name indicates active military service]

## Allegan County

Beckett, M. B.....Allegan
Benning, H. M.....Allegan
Brown, Lewis Freeman .....Otsego
Brunson, Eugene T.....Ganges
Clough, William J.....Saugatuck
Dickinson, C. A.....Wayland
Dolfin, W. E.....Wayland
Flinn, C. C.....Allegan
Hamelink, M. H.....Hamilton
Hudnutt, Orrin Dean.....Plainwell
Johnson, E. B. .....Allegan
Johnson, H. H.....Martin
Mahan, James E.....Allegan
Medill, W. C.....Plainwell
Osmun, E. D.....Allegan
Ramseyer, Gladwin E.....Plainwell
Rigterink, George H.....Hamilton
Roberts, M. S.....Fennville
Shepard, Lyle .....Otsego
*Stuch, Howard T. ..... ..... Carlisle Barracks, Penn.
Stuck, Olin H.....Otsego
Vaughan, W. R.....Plainwell
Van Der Kolk, Bert.....Hopkins
Walker, Robert J.....Saugatuck

## Alpena County

Bunting, J. W. .....Alpena
Burkholder, H. J.....Alpena
Carpenter, Clarence A.....Onaway
Constantine, A. .....Harrisville
Hier, Edward A.....Alpena
Kessler, Harold .....Alpena
Lister, George F.....Hillman
Miller, A. R.....Harrisville
Moffat, Gordon B.....Rogers City
Monroe, Neil C.....Rogers City
O'Donnell, F. J.....Alpena
Parmenter, E. S.....Alpena
Purdy, John W.....Lachine
Rutledge, S. H.....Rogers City
Secrist, Leo F.....Alpena
Wienczewski, Theophile .....Alpena

## Barry County

Altland, J. K. .....Hastings
Cobb, Thomas H.....Woodland
Farwell, Byron E. .....Delton
Finnie, R. G.....Hastings
Fisher, Gordon F.....Hastings
Gwinn, A. B.....Hastings
Harkness, Robert B.....Hastings
Keller, Guy C.....Hastings
Lathrop, Clarence P.....Hastings
Lofdahl, Stewart .....Nashville
Lund, Chester A. E.....Middleville
McIntyre, K. S. .....Hastings
Morris, Edgar T.....Nashville
Wedel, Herbert S.....Freeport

## Bay County

Alcorn, Kent .....Bay City
Allen, A. D.....Bay City
Andrews, F. T.....Bay City
Appel, S. .....New York City
Asline, J. N.....Essexville
Austin, Justis .....Tawas City
Baker, Charles H.....Bay City
Ballard, Sylvester L.....Bay City
Ballard, W. R.....Bay City
Boulton, A. O.....Gladwin
Brown, G. M.....Bay City
Connelly, C. J.....Bay City
Criswell, R. H.....Bay City
Dardas, M. J.....Bay City
DeWaele, Paul L.....Bay City
Dickinson, John W.....Oscoda
Drummond, Fred .....Kawkawlin
Dumond, V. H.....Bay City
Ely, Nina .....Bay City
Foster, L. Fernald.....Bay City
Freel, John A.....Bay City
Gamble, W. G., Jr.....Bay City
Gronemeyer, W. H.....Bay City
Groomes, Charles .....Bay City
Grosjean, J. C.....Bay City
Gunn, Robert .....Standish
Gustin, J. W.....Bay City
Hall, R. F. .....Bay City
*Hagelshaw, G. L. .....Carlisle, Pa.
Hasty, Earl .....Whittemore
Healy, Gaillard H.....Bay City
Hess, C. L.....Bay City
Heuser, Harold H.....Bay City
Horowitz, S. Franklin.....Bay City
Huckins, E. S.....Bay City
Hughes, E. C.....Bay City
Husted, F. Pitkin.....Bay City
Jacoby, A. H.....Bay City
Jens, Otto .....Essexville
Jones, Jerry M.....Bay City
Kerr, William .....Bay City
Kessler, Mana .....Bay City
Kessler, S. .....Bay City
Knobloch, Howard .....Bay City
Kowals, F. V.....Bay City
Lane, Milton .....Bay City
Laverty, L. F. .....Bay City
Lerner, David .....Au Gres
McEwan, J. H.....Bay City
MacPhail, Joseph .....Bay City
Medvesky, M. J.....Bay City
Miller, Edwin C.....Bay City
Miller, Maurice C. .....Auburn
Mitton, O. W.....East Tawas
Moore, George W.....Bay City
Moore, Neal R.....Bay City
Mosier, D. J.....Bay City
Perkins, Roy C.....Bay City
Pearson, Stanley M.....Bay City
*Reutter, C. W.....Mt. Clemens
Riley, R. B.....Bay City
Scrafford, Royston Earl.....Bay City
Shafer, H. C.....Bay City
Sherman, R. N.....Bay City
Slattery, M. R.....Bay City
Staley, Hugh .....Omer
Stinson, W. S.....Bay City
Stuart, Kenneth .....Bay City
Swantek, Charles M.....Bay City
*Tarter, Clyde S. .....Alexandria, La.
Timreck, Harold A. .....Beaverton
Tupper, Virgil L.....Bay City
Urmston, Paul R.....Bay City
Warren, E. C.....Bay City
Wilcox, J. W.....Bay City
Wilson, Thomas G.....Bay City
Wittwer, E. A.....Bay City
Woodburne, H. L.....Bay City
Zaremba, Aloysius J. .....Bay City
Ziliak, A. L.....Bay City

## Berrien County

Allen, J. U.....Benton Harbor
Allen, Robert Clarke .....St. Joseph
Anderson, H. B.....Watervliet
Bartlett, Wm. M. ....Benton Harbor
Belsley, Frank K.....Benton Harbor
Bliesmer, A. F.....St. Joseph
Brown, F. W. .....Watervleit
Brown, G. W. .....Buchanan
Brown, Rolland J. ....Benton Harbor
Burrell, H. J.....Benton Harbor
Cawthorne, H. J.....Benton Harbor
Conybeare, R. C.....Benton Harbor
Crowell, Richard.....St. Joseph
Dunnington, R. N.....Benton Harbor
Eidson, Hazel .....Berrien Springs
*Ellett, W. C. .....New York City
Emery, Clayton.....St. Joseph
Faber, Michael .....Benton Harbor
Friedman, Morris.....New Buffalo
Gillette, Clarence H.....Niles
Gunn, J. W. .....Watervleit
Hanna, P. G.....St. Joseph
Harper, Ina .....Benton Harbor
Harrison, L. L.....Niles
Hart, Russell T.....Niles
Helkie, William L.....Three Oaks
Henderson, Fred .....Niles
Henderson, Robert .....Niles
Herring, Nathaniel A. .....Niles
Hershey, Noel J.....Niles
Higbee, Frank O.....Three Oaks
Howard. R. B. .....Benton Harbor
Huff, H. D.....Niles
Ingleright, Leon R. .....Niles
King, Frank, Jr. .....Benton Harbor
King, Frank A. .....Benton Harbor
Kling, H. C.....Niles
Kok, Harry .....Benton Harbor
Leva, John B. .....Benton Harbor
Littlejohn, William .....Bridgman
McDermott, J. J.....St. Joseph
Merritt, Charles W.....St. Joseph
Miller, E. A.....Berrien Springs
Mitchell, Carl A.....Benton Harbor
Moore, T. Scott .....Niles
Ozeran, Charles J.....Benton Harbor
Pritchard, H. M. .....Niles
Reagan, Robert E.....Benton Harbor
Richmond, D. M.....St. Joseph
Rosenberry, A. A.....Benton Harbor
Ruth, J. G. .....Benton Harbor
Scholten, Roger A.....Niles
Schram, John A.....St. Joseph
Smith, W. A.....Berrien Springs
Sowers, Bouton.....Benton Harbor
Strayer, J. C.....Buchanan
Thorup, Don W.....Benton Harbor
Waterson, Roy S. .....Niles
Westervelt, H. O.....Benton Harbor
Yeomans, T. G.....St. Joseph

## Branch County

Bailey, J. E.....Bronson
Beck, Perry C.....Bronson
Bien, W. J.....Coldwater
Chipman, E. M.....Quincy
Culver, Bert W.....Coldwater
Far, S. E.....Quincy
Fraser, R. J.....Coldwater
Gist, L. I.....Coldwater
Jarvis, Charles .....Grand Rapids
McLain, R. W.....Jackson
Meier, H. J.....Coldwater
Mooi, H. R.....Union City
Olmsted, Kenneth L.....Coldwater
Phillips, F. L.....Bronson
Schneider, H. A.....Coldwater
Schultz, Samuel .....Coldwater
*Scovill, H. A. .....Fort Custer
Thomas, J. A.....Coldwater
Wade, R. L.....Coldwater
Walton, N. J.....Quincy
Weidner, H. R.....Coldwater

## Calhoun County

Abbott, Nelson .....Homer
Amos, Norman H.....Battle Creek
Baribeau, R. H.....Battle Creek
Barnhart, Samuel E.....Battle Creek
Becker, H. F.....Battle Creek
Beuker, Herman .....Marshall
Bonifer, Philip P. .....Battle Creek
Brainard, C. W.....Battle Creek
Campbell, Alice .....Albion
Campbell, R. J.....Battle Creek
Church, Starr K.....Marshall
*Chynoweth, W. R. .....
.....Fort Sam Houston, Texas
Cooper, J. E.....Battle Creek
Curles, Grant R. .....Battle Creek
Curry, Robert K.....Homer
Derickson, E. C.....Burlington
Dickson, A. R.....Battle Creek
Dodge, Warren M., Jr.....Battle Creek
Fahndrich, C. G.....Battle Creek
Finch, D. L.....Augusta
Forsyth, J. F.....Albion
Fraser, R. H.....Battle Creek
Funk, L. D.....Athens
Gething, Joseph W.....Battle Creek
Giddings, A. M.....Battle Creek
Gilfillan, Margery J.....Battle Creek
Godfrey, Willoughby L...Battle Creek
Gorsline, Clarence S.....Battle Creek
Graubner, F. L.....Marshall
Hafford, Alpheus T.....Albion
†Hafford, Geo. C.....Albion
Hale, Claude E. .....Marshall
Hansen, E. L.....Battle Creek
Hansen, Harvey C.....Battle Creek
Haughey, Wilfrid.....Battle Creek
Heald, C. W.....Battle Creek
Henderson, Louis M.....Albion
Henderson, Phillip .....Albion
Herzer, Henry A.....Albion
Hills, C. R.....Battle Creek
Holes, Jesse J.....Battle Creek
Holtom, B. G.....Battle Creek
Howard, W. L.....Battle Creek
Hoyt, Aura A.....Battle Creek
Hubly, James W.....Battle Creek
Humphrey, Archie Edward...Marshall
Humphrey, Arthur A.....Battle Creek
Jesperson, Lydia .....Battle Creek
Johnston, S. Theron.....Battle Creek
Jones, T. K.....Marshall
Keagle, Leland R.....Battle Creek
Keeler, K. B.....Albion
Kellogg, Carrie Staines....Battle Creek
Kellogg, John H.....Battle Creek
Kingsley, Paul C.....Battle Creek
Kinde, M. R.....Battle Creek
Kolvoord, Theodore .....Battle Creek
LaFrance, N. Francis....Battle Creek
Landon, Charles C.....Battle Creek
Levy, Joseph .....Battle Creek
Lewis, W. B.....Battle Creek
Lowe, H. M.....Battle Creek
Lowe, Kenneth .....Battle Creek
Lowe, Stanley T.....Battle Creek
MacGregor, Archibald E...Battle Creek
McNair, L. N.....Albion
Meister, F. O. .....Battle Creek
Melges, F. J.....Battle Creek
Mercer, C. M.....Battle Creek
Morrison, Donald B.....Tekonsha
Mortensen, M. A...Santa Monica, Cal.
Moshier, Bertha .....Battle Creek
Mullenmeister, H. F.....Battle Creek
Mustard, Russell .....Battle Creek
Patterson, Adonis .....Battle Creek
Riley, William H.....Battle Creek
Robbert, John .....Climax
Robins, Hugh .....Marshall
Rorick, Wilma Weeks.....Battle Creek
Rosenfeld, Joseph E.....Battle Creek
Roth, Paul .....Battle Creek
Royer, C. W.....Battle Creek
Selmon, Bertha L.....Battle Creek
Sharp, A. D.....Albion
Shipp, Leland P.....Battle Creek
Simpson, Robert S.....Battle Creek
Slagle, George W.....Battle Creek
Sleight, James D. .....Battle Creek
Sleight, Raymond D.....Battle Creek
*Smith, T. C. .....Canadian Army
Stadle, Wendell H.....Battle Creek
Stewart, Charles E.....Battle Creek
Stiefel, Richard .....Battle Creek
Tannenholz, Harold S.....Battle Creek
Taylor, Clifford B.....Albion
Thompson, Oliver E.....Battle Creek
Upson, W. O.....Battle Creek
Van Camp, Elijah.....Battle Creek
Vander Voort, W. V.....Battle Creek
Verity, Lloyd E.....Battle Creek
Vollmer, Maud J.....Moline, Ill.
Walters, F. R.....Battle Creek
Walters, Royal W.....Battle Creek
Watson, Bernard .....Battle Creek
Wencke, Carl G.....Battle Creek
Whyte, Bruce .....Battle Creek
Winslow, Rollin C.....Battle Creek
Winslow, Sherwood B.....Battle Creek
Zindler, George A. .....Battle Creek
*Zinn, Karl .....Rockford, Ill.

## Cass County

Adams, U. M.....Marcellus
Clary, R. I.....Dowagiac
Cunningham, E. M.....Cassopolis
Hickman, John .....Dowagiac
Kelsey, James H.....Cassopolis
Loupee, George .....Dowagiac
Loupee, S. L.....Dowagiac
Lyman, W. R.....Dowagiac
Newsome, Otis .....Cassopolis
Pierce, Kenneth C.....Dowagiac
Switzer, Lars M. .....Cassopolis
Zwergel, E. H.....Cassopolis

## Chippewa-Mackinac Counties

Bandy, Festus Cecil..Sault Ste. Marie
Birch, William.....Sault Ste. Marie
Blain, James G.....Sault Ste. Marie
Cook, Carl S.....Mackinac Island
Cornell, Eliphalet A...Sault Ste. Marie
Cowan, Donald .....Sault Ste. Marie
Gilfillan, E. O.....Sault Ste. Marie
Hakala, L. J.....Sault Ste. Marie
Littlejohn, David ....Sault Ste. Marie
McBryde, Lyman M...Sault Ste. Marie
Mertaugh, W. F.....Sault Ste. Marie
Moloney, F. J.....Sault Ste. Marie
Montgomery, B. T.....Sault Ste. Marie
Rhind, E. S.....St. Ignace
Vegors, Stanley H.....Sault Ste. Marie
Wallen, LeRoy J.....Sault Ste. Marie
Webster, E. H.....Sault Ste. Marie
Willison, C. .....Sault Ste. Marie
Yale, I. V.....Sault Ste. Marie

## Clinton County

Elliott, Bruce R.....Ovid
Foo, Charles T.....St. Johns
Frace, Guy H.....St. Johns
Hart, Dean W.....St. Johns
Ho, Thomas Y.....St. Johns
Luton, F. E.....St. Johns
MacPherson, D. H.....Fowler
McWilliams, W. B.....Maple Rapids
Russell, Sherwood R.....St. Johns
Stoller, Paul .....Fowler
Wahl, George Edward .....St. Johns

## Delta County

Bachus, Arthur .....Powers
Bartley, George C.....Escanaba
Benson, G. W.....Escanaba
Boyce, D. H.....Escanaba
Brenner, Ervin J.....Manistique
Carlton, A. J.....Escanaba
Chenoweth, Nancy R.....Escanaba
Clausen, C. H. .....Gladstone
Defnet, Harry John.....Escanaba
Diamond, J. A.....Gladstone
Forrester, Claud R. G. .....Garden
Frenn, N. J.....Bark River
Fyvie, James .....Manistique
Groos, Harold Quinten.....Escanaba
Groos, Louis P.....Escanaba
Hult, Otto S.....Gladstone
Kitchen, A. S.....Escanaba
Lemire, William A.....Escanaba
Lindquist, N. L.....Manistique
Long, Harry W.....Escanaba
McInerny, T. .....Escanaba
Miller, Albert H.....Gladstone
Mitchell, James P.....Gladstone
Moll, G. W.....Escanaba
Shaw, George A.....Manistique
Tonney, Fred O.....Escanaba
Walch, J. J.....Escanaba

## Dickinson-Iron Counties

Alexander, W. H.....Iron Mountain
Andersen, E. B.....Iron Mountain
Boyce, George H.....Iron Mountain
Browning, James L.....Iron Mountain
DeSalvo, Francis .....Iron Mountain
Fiedling, William .....Norway
Fredrickson, Geron ....Iron Mountain
Gloss, Kenneth E. .....Crystal Falls
*Haight, Harry M. ..San Diego, Calif.
Hamlin, Lloyd E.....Norway
Hayes, R. E.....Sagola
Huron, W. H.....Iron Mountain
Irvine, L. E.....Iron River
Kerr, Loren, .....Stambaugh
Kofmehl, William J.....Stambaugh
Levine, D. A.....Iron River
Menzies, Clifford .....Iron Mountain
Place, Edwin H. .....Iron Mountain
Retallack, R. C. .....Iron River
Smith, Donald R.....Iron Mountain
White, Robert E.....Stambaugh

†Deceased April 19, 1941.

## Eaton County

Anderson, K. A. ...Harlingen, Texas
Arner, Fred Levi.....Bellvue
Brown, B. Philip.....Charlotte
Burdick, Austin F.....Grand Ledge
Carothers, Daniel J. .....Charlotte
Engle, Paul .....Olivet
Hannah, H. W.....Charlotte
Hargrave, Don V.....Eaton Rapids
Huber, Charles D.....Charlotte
Huyck, Stanhope Pier .....Sunfield
Imthun, Edgar F.....Grand Ledge
Lawther, John .....Ann Arbor
McLaughlin, C. L. D. ...Vermontville
Moyer, H. A.....Charlotte
Myers, Albert W.....Potterville
Paine, E. Madison, Jr...Grand Ledge
Paine, E. M.....Grand Ledge
Quick, Phil H.....Olivet
Rickerd, Vinton J.....Charlotte
Sackett, C. S. .....Charlotte
Sassaman, F. W.....Charlotte
Sevener, C. J.....Charlotte
Sevener, Lester G.....Charlotte
Sheets, A G.....Eaton Rapids
Stanka, Andrew George...Grand Ledge
Stimson, C. A.....Eaton Rapids
Stucky, George .....Charlotte
Van Ark, Bert.....Eaton Rapids
Wilensky, Thomas .....Eaton Rapids

## Genesee County

Adams, Chester .....Grand Blanc
Andrews, N. A. C.....Flushing
Anthony, George E.....Flint
Backus, G. R.....Flint
Bahlman, Gordon H.....Flint
Baird, James .....Flint
Bald, Frederick W.....Flint
Barbour, Fleming A. .....Flint
Baske, Franklin W.....Flint
Bateman, L. G.....Flint
Benson, J. C.....Flint
Bernstein, Eli N. .....Flint
Bishop, D. L.....Flint
Blakeley, A. C.....Flint
Bogart, Leon M.....Flint
Boles, William P.....Flint
Bonathan, A. T.....Flint
Bradley, Robert .....Flint
Brain, R. Gordon.....Flint
Branch, Hira E. .....Flint
Brasie, D. R.....Flint
Briggs, Guy D.....Flint
Burkett, L. V.....Flint
Burnell, Max .....Flint
Burnside, Howard B. .....Flint
Chambers, Myrton S.....Flint
Chandler, M. E.....Flint
Charters, John H.....Fenton
Childs, Lloyd H.....Flint
Clark, Clifford P.....Flint
Clift, M. William.....Flint
Cohen, Evelyn .....Flint
Colwell, C. W.....Flint
Connell, J. T.....Flint
Conover, G. V.....Flint
Conover, T. S.....Flint
Cook, Henry .....Flint
Covert, F. L.....Gaines
Credille, B. A.....Flint
Curry, George .....Flint
Curtin, J. H.....Flint
Del Zingro, N.....Davison
Dimond, E. G.....Flint
Dodds, F. E.....Flint
Drewyer, Glen .....Flint
Edgerton, A. C.....Clio
Eichhorn, Ernest .....Flint
Elliott, H. B.....Flint
Evers, J. W.....Flint
Farhat, M. M.....Flint
Finkelstein, T. .....Flint
Flynn, S. T.....Flint
Foley, S. I.....Flint
Fuller, H. T.....Mt. Morris
Gelenger, S. M.....Flint
Gibson, Edward D.....Flint
Gleason, N. Arthur.....Flint
Goering, George R.....Flint
Golden, H. Maxwell.....Flint
Goodfellow, B. .....Flint
Gorne, S. S.....Flint
Grover, H. F.....Flint
Guile, Earle .....Flint
Guile, G. S.....Flint
Gundry, G. L.....Grand Blanc
Gutow, I. .....Flint
Gutow, J. J.....Flint
*Hague, R. F. .....Dearborn, Mich.
Halligan, Raymond S.....Flint
Handy, John W.....Flint
Harper, A. W.....Flint
Harper, Homer .....Flint
Harrison, L. D. .....Saginaw
Hawkins, James E.....Flint
Hays, George A.....Flint
Hiscock, H. H.....Flint
Hoshal, V. L. .....Flint
Houston, James .....Swartz Creek
Hubbard, William B.....Flint
Johnson, F. .....Flint
Kaufman, Lewis D.....Flint
Kirk, A. Dale.....Flint
Knapp, M. S. .....Fenton
Kretchmar, A. H.....Flint
Kurtz, J. J.....Flint
Lambert, L. A.....Flint
Lavin, Kathryn R.....Flint
Leach, J. L.....Flint
Logan, G. W.....Flushing
MacDuff, R. B.....Flint
MacGregor, D. M.....Flint
MacGregor, R. W.....Flint
Macksood, Joseph .....Flint
Malfroid, B. W.....Flint
Marshall, William H.....Flint
Marsh, H. L.....Flint
Mason, Elta .....Flint
Matthewson, Guy C.....Flint
McArthur, A. .....Flint
McArthur, R. H.....Clio
McGarry, Burton G.....Fenton
McGarry, R. A.....Flint
McGregor, James C.....Flint
McKenna, O. W.....Flint
Miller, Bryce .....Flushing
Miller, Edwin E.....Flint
Miner, Frederick B.....Flint
Moore, John W.....Flint
Moore, Kenneth B.....Flint
Morrish, Ray S.....Flint
Morrissey, V. H.....Flint
Moiser, Edward C.....Otisville
Odle, Ira .....Flint
Olson, James A.....Flint
O'Neil, C. H.....Flint
Orr, J. Walter.....Flint
Phillips, R. L.....Flint
Pfeifer, A. C.....Mt. Morris
Pratz, O. C.....Flint
Preston, Otto .....Flint
Probert, C. C.....Flint
Randall, H. E.....Flint
Reeder, Frank E.....Flint
Reichard, Orill .....Flint
Reid, Wells C.....Goodrich
Reynolds, A. J.....Flint
Rice, E. D.....Flint
Richeson, V.....Flint
Roberts, Floyd A.....Flint
Rowley, James A.....Flint
Rundles, Walter Z.....Flint
Rynearson, W. J.....Fenton
Sandy, K. R.....Flint
Scavarda, Charles J.....Flint
Schiff, B. A.....Flint
Scott, R. D.....Flint
Shantz, L. O.....Flint
Sleeman, Blythe R.....Linden
Sheeran, Daniel H.....Flint
Shipman, Charles W.....Flint
Smith, D. C.....Flint
Smith, E. C.....Flint
Smith, Maurice J.....Flint
Sniderman, Benjamin .....Flint
Snyder, Charles E.....Swartz Creek
Sorkin, Morris L.....Flint
Sorkin, S. S.....Flint
Spencer, J. A.....Flint
Steinman, F. H.....Flint
Stephenson, Robert A.....Flint
Stevenson, W. W.....Flint
Streat, R. W.....Flint
Stroup, C. K.....Flint
Sutherland, James K.....Flint
Sutton, George .....Flint
Sutton, M. R.....Flint
Thompson, Alvin .....Flint
Treat, D. L.....Flint
Trumble, G. W.....Flint
Vary, Edwin P.....Flint
Walcott, C. G.....Fenton
Walden, C. E.....Flint
Ward, Nell .....Flint
Ware, Frank A.....Flint
Wark, D. R.....Flint
White, Herbert .....Flint
Williams, W. S.....Flint
Willoughby, G. L.....Flint
Willoughby, L. L.....Flint
Wills, T. N.....Flint
Winchester, Walter H.....Flint
Woughter, Harold W.....Flint
Wright, D. R.....Flint
Wright, G. R.....Montrose
Wyman, J. S.....Flint

## Gogebic County

Anderson, Charles E.....Bessemer
Conley, W. C.....Ironwood
Crosby, Theodore S.....Ironwood
Gertz, M. A.....Ironwood
Gorrilla, A. C.....Ironwood
Gullickson, Miles .....Ironwood
Lieberthal, M. J.....Ironwood
Lieberthal, Paul .....Ironwood
Maloney, F. G. H.....Ironwood
Nezworski, H. T.....Ramsey
O'Brien, A. J.....Ironwood
Pinkerton, H. A.....Ironwood
Pinkerton, W. J.....Bessemer
Rees, Thomas R.....Ironwood
Reynolds, F. L.....Ironwood
Stevens, Charles E.....Bessemer
Tew, William Ellwood.....Bessemer
Tressel, H. A.....Wakefield
Urquhart, C. C.....Ironwood
Wacek, W. H.....Ironwood

## Grand Traverse-Leelanau-Benzie Counties

Bolan, Ellis J.....Suttons Bay
Brownson, Jay J.....Kingsley
Brownson, Kneale .....Traverse City
Bushong, B. B.....Traverse City
Covey, E. L. .....Honor
Ellis, Claude I.....Suttons Bay
Evans, E. E. .....McAlester, Okla.
Gauntlett, J. W.....Traverse City
Goodrich, Dwight .....Traverse City
Grawn, F. A.....Traverse City
Hamilton, Earl E.....Traverse City
Holliday, George A.....Traverse City
Huene, Nevin .....Traverse City
Huston, Russell R.....Elk Rapids
Jerome, Jerome T.....Traverse City
Kitson, V. H.....Elk Rapids
Knapp, J. L. .....Traverse City
Kyselka, H. B.....Traverse City
Lemen, Charles E.....Traverse City
Lossman, R. T.....Traverse City
Murphy, Fred E. .....Cedar
Nickels, M. M.....Traverse City
Osterlin, Mark .....Traverse City
Rennell, E. J. .....Traverse City
Rinear, Edwin .....Traverse City
Sheets, R. Philip .....Traverse City
Sladek, E. F.....Traverse City
Stone, Fordyce, H.....Beulah
Swanton, L. .....Traverse City
Swartz, F. G.....Traverse City
Thacker, Fred R.....Frankfort
Thirlby, E. L.....Traverse City
Thompson, T. W.....Traverse City
Trautman, Frederick D.....Frankfort
Way, Lewis R.....Traverse City
Weitz, Harry .....Traverse City
Willard, Wm. G. .....Benzonia
Willoughby, Frances Lois.Traverse City
Zielke, I. H.....Traverse City
Zimmerman, J. G.....Traverse City

## Gratiot-Isabella-Clare Counties

Aldrich, Alfred L.....Ithaca
Barstow, D. K.....St. Louis
Barstow, William E.....St. Louis
Baskerville, C. M. .....Mt. Pleasant
Becker, Myron G.....Edmore
Budge, M. J.....Ithaca
Burch, L. J.....Mt. Pleasant
Burt, C. E.....Ithaca
Dale, Edward C.....Shepherd
Davis, L. L.....Mt. Pleasant
Drake, Wilkie M.....Breckenridge
Du Bois, C. F.....Alma
Graham, B. J. .....Alma
Hall, B. C.....Pompeii
Hammerberg, Kuno .....Clare
Harrigan, W. L.....Mt. Pleasant
Howe, Leslie A. .....Breckenridge
Howell, Don M.....Alma
Johnson, P. R.....Mt. Pleasant
Lamb, E. T.....Alma
McArthur, Stewart C.....Mt. Pleasant
Oldham, E. S.....Breckenridge
Rondot, E. F.....Lake
Rottschafer, J. L. .....Alma
Sanford, B. J.....Clare
Sarven, James D.....Middleton
Silvert, P. P. .....Vestaburg
Slattery, F. G.....Clare
Town, F. R. .....Mt. Pleasant
Waggoner, R. L.....St. Louis
Wilcox, R. A.....Alma
Wilson, Earl C.....Harrison
Wolfe, Kenneth P.....Alma
Wood, Cornelius B.....Clare

## Hillsdale County

Alleger, W. E.....Pittsford
Bower, Charles T.....Hillsdale
Clobridge, C. E.....Allen
Day, Luther W.....Jonesville
Davis, L. A. .....Montgomery
Fisk, Fred B.....Jonesville
Gray, J. P. .....Hillsdale
Green, B. F.....Hillsdale
Hanke, George R.....Ransom
Hodge, C. L.....Reading
Hughes, Henry F.....Hillsdale
Joerin, Wm. .....Camden
*Johnson, C. E. ....Camp Meade, Va.
*Kinzel, R. W.....Litchfield
Kline, Fred D.....Litchfield
MacNeal, J. A. .....Hillsdale
Mattson, H. F.....Hillsdale
Martindale, E. A.....Hillsdale
McFarland, O. G.....North Adams
Miller, Harry C.....Hillsdale
Poppen, C. J.....Reading
Sandor, A. A. .....Hillsdale
Sawyer, Walter .....Jonesville
Sterling, John S.....Jerome
Strom, A. W.....Hillsdale
Yeagley, J. L.....Waldron

## Houghton-Baraga-Keweenaw Counties

Abrams, James C.....Calumet
Acocks, J. R.....Houghton
Aldrich, A. B.....Houghton
Aldrich, Leonard .....Hancock
Bourland, Philip D.....Calumet
Brewington, George F.....Mohawk
Buckland, R. S.....Baraga
Burke, John .....Hubbell
Coffin, Leslie E.....Painesdale
Cooper, C. A.....Hancock
Gregg, W. T. S.....Calumet
Hillmer, R. E.....Beacon Hill
Janis, A. J.....Hancock
*Kadin, Maurice .....Rockford, Ill.
King, William T.....Ahmeek
Kirton, Joseph R. W.....Calumet
LaBine, Alfred .....Houghton
Levin, Simon .....Houghton
MacQueen, Donald K.....Laurium
Manthei, W. A.....Lake Linden
Marshall, Frank F.....L'Anse
McClure, Robert James.....Calumet
Pleune, R. E.....Houghton
Quick, James B.....Laurium
Roche, A. C.....Calumet
Sarvela, H. L. .....Hancock
Scott, William P.....Houghton
Sloan, Paul S. .....Houghton
Smith, Charles R.....Houghton
Stern, Isadore D.....Houghton
Stewart, G. C.....Hancock
Stewart, J. C. B.....Painesdale
Tinetti, Ernest F.....Laurium
Ware, H. M.....Calumet
Willson, P. H.....Chassell
Winkler, Henry J.....L'Anse

## Huron County

Caccamise, Joseph G. .....Sebewaing
Gettel, Roy R. .....Kinde
Henderson, J. Bates .....Pigeon
Herrington, Willet J. .....Bad Axe
Holdship, Wm. B. .....Ubly
Monroe, Duncan J. .....Elkton
Morden, Charles B. .....Bad Axe
Oakes, C. W. .....Harbor Beach
Ritsema, John .....Sebewaing
Scheurer, C. .....Pigeon
Thumme, Harrison F. .....Sebewaing

## Ingham County

Albers, J. H.....East Lansing
Albert, Wilford D.....Leslie
Barnum, S. V.....Lansing
Barrett, C. D.....Mason
Bartholomew, Henry S.....Lansing
Bauer, Theodore I.....Lansing
Behen, William C.....Lansing
Bellinger, E. G.....Lansing
Black, Charles E.....Lansing
Block, Bernita .....Lansing
Bradford, C. W.....Lansing
Breakey, Robert S.....Lansing
Brubaker, E. .....Lansing
Brucker, Karl B.....Lansing
Bruegel, Oscar H.....East Lansing
Burhans, Robert .....Lansing
Cameron, W. J.....Lansing
Campbell, Archibald M.....Lansing
Carr, Earl I.....Lansing
Christian, L. G.....Lansing
Clark, William E.....Mason
Clinton, George .....Mason
Cook, R. J.....Lansing
Cope, H. E. .....Lansing
Corneliuson, Goldie .....Lansing
Corsaut, J. C.....Mason
Cross, Frank S. .....Lansing
Darling, L. H.....Lansing
Davenport, C. S.....Lansing
Dean, Carleton .....Lansing
DeBold, Frederick F. .....Lansing
DeVries, C. F.....Lansing
Doyle, Charles R.....Lansing
Doyle, C. P.....Lansing
Drolett, Fred J.....Lansing
Drolett, Lawrence .....Lansing
Dunn, F. C.....Lansing
Dunn, F. M.....Lansing
Ellis, Bertha W.....Lansing
Ellis, C. W.....Lansing
Finch, Russell L.....Lansing
Fisher, D. W.....Lansing
Folkers, Leonard M. ....East Lansing
Fosget, Wilbur W.....Lansing
Foust, E. H.....Lansing
French, Horace L.....Lansing
Galbraith, Dugald A.....Lansing
Gardner, C. B.....Lansing
Gibson, T. E.....Lansing
Goldner, R. E.....Lansing
Gunderson, G. O.....Lansing
Hagele, Marie A. .....Lansing
Harris, Dean W.....Lansing
Harrold, J. F.....Lansing
Hart, L. C.....Lansing
Haynes, H. B.....Lansing
Haze, Harry A.....Lansing
Heckert, Frank B.....Lansing
Heckert, J. K.....Lansing
Hendren, Owen .....Williamston
Henry, L. L.....Lansing
Hermes, Ed. J.....Lansing
Himmelberger, R. J.....Lansing
Hodges, Kenneth P.....Lansing
Holland, Charles F.....East Lansing
Huggett, Clare C.....Lansing
Huntley, Fred M.....Lansing
Hurth, M. S.....Lansing
Hutchinson, W. G. .....Lansing
Johnson, K. H.....Lansing
Jones, Francis A.....Lansing
Jones, Francis, Jr.....Lansing
Kalmbach, R. E.....Lansing
Keim, O. D.....Lansing
Kelly, Wm. H. .....Lansing
Kent, Edith Hall.....Lansing
Kent, Herbert K.....Lansing
Kraft, L. C.....Leslie
Larrabee, E. E.....Williamston
LeDuc, Don M. .....Lansing
Loree, Maurice C.....Lansing
Lucas, T. A.....Lansing
Ludlum, L. C.....Lansing
Martin, Wayne C. .....Lansing
McConnell, E. G.....Lansing
McCorvie, C. Ray.....East Lansing
McCoy, Earl M.....Grand Ledge
McCrumb, R. R.....Lansing
McElmurry, N. K.....Perry
McGillicuddy, Oliver B.....Lansing
McGillicuddy, R. J.....Lansing
McIntyre, J. E.....Lansing
McNamara, William E.....Lansing
McPherson, E. G. .....Champion
Mercer, Walter E.....East Lansing
Meyer, Hugh R.....Lansing
Miller, H. A.....Lansing
Mitchell, A .B.....Lansing
Morrow, R. J.....Lansing
Newitt, Arthur W. ...Tavares, Florida
Niles, B. D.....Lansing
Ochsner, P. J.....Lansing
O'Sullivan, Gertrude .....Mason
Owen, A. E.....Lansing
Phillips, R. H.....Lansing
Pinkham, R. A.....Lansing
Ponton, J. .....Mason
Prall, H. J.....Lansing
Randall, O. M.....Lansing
Richards, F. D.....DeWitt
Roberts, D. W.....Lansing
Robson, Edmund J.....Lansing
Rozan, J. S.....Lansing
Rozan, M. M.....Lansing
Russell, Claude V.....Lansing
Sander, John F.....Lansing
Sanford, Thomas M.....Lansing
Schnute, Louise F.....East Lansing
Seger, Fred L.....Lansing
Sichler, Harper G. .....Lansing
Silverman, Irving E. .....Lansing
Shaw, Milton .....Lansing
Smith, Anthony V.....Mason
Smith, H. M.....Lansing
Smith, Lillian R.....Lansing
Snell, D. M.....Lansing
Snyder, Le Moyne.....Lansing
Spencer, Perry .....Lansing
Steiner, A. A.....Lansing
Stiles, Frank .....Lansing
Strauss, P. C.....Lansing
Stringer, C. J.....Lansing
Tamblyn, F. W.....Lansing
Toothaker, Kenneth .....Lansing
Towne, Lawrence C.....Lansing
Troost, F. L.....Holt
Vander Slice, E. R.....Lansing
*Vander Zalm, T. P...Fort Knox, Ky.
Wadley, R. .....Lansing
Warford, J. T.....Lansing
Webb, Roy O.....Okemos
Weinburgh, H. B.....Lansing
Welch, William H.....Lansing
*Wellman, John M. .....Atlanta, Ga.
Wetzel, John O.....Lansing
Wheeler, Warren E. .....Lansing
Wiley, Harold W.....Lansing
Willson, Howard S.....Lansing
Wilson, Harry A.....Lansing

## Ionia-Montcalm Counties

Bird, William L.....Greenville
Bower, A. J.....Greenville
Bracey, L. E.....Sheridan
Bunce, E. P.....Trufant
Dunkin, Lloyd S.....Greenville
Ferguson, F. H.....Carson City
Fleming, J. C.....Pewamo
Fox, Harold M.....Portland
Fuller, Rudolphus W.....Crystal
Geib, O. P.....Carson City
Hansen, Carl M.....Stanton
Hansen, M. M.....Greenville
Haskell, Robert H.....Northville
Hoffs, M. A.....Lake Odessa
Hollard, A. E.....Belding
Johns, Joseph J.....Ionia
Kelsey, L. E.....Lakeview
Kling, V. F.....Ionia
Lilly, Isaac S.....Stanton
Lintner, Roy C.....Ionia
Marsh, F. M.....Ionia
Marston, L. L.....Lakeview
Maynard, Herbert M.....Ionia
McCann, John J.....Ionia
Mintz, Morris J.....Greenville
Norris, William W.....Portland
Peabody, C. H.....Lake Odessa
Pankhurst, C. T.....Ionia,
Phelps, Everett L.....Clarksville
Slagh, Milton E. .....Saranac
Socha, Edmund S. .....Ionia
Swift, E. R.....Lakeview
VanDuzen, V. L.....Belding
VanLoo, J. A.....Belding
Weaver, Harry B. .....Greenville
Whitten, R. R.....Ionia
Willits, C. O.....Saranac

## Jackson County

Ahronheim, J. H.....Jackson
Alter, R. H.....Jackson
Baker, G. M.....Parma
Balconi, Henry .....Jackson
Bartholic, F. W.....Grass Lake
Beckwith, S. A. .....Jackson
Brown, H. A.....Jackson
Bullen, G. R.....Jackson
Chabut, H. M.....Jackson
Chivers, R. W.....Jackson
Clarke, C. S.....Jackson
Cochrane, Wayne A.....Jackson
Cooley, Randall M.....Jackson
Corley, C. .....Jackson
Corley, Ennis .....Jackson
Cox, Ferdinand .....Jackson
Crowley, Edward D.....Jackson
Culver, Guy D.....Stockbridge
DeMay, C. E.....Jackson
Dengler, C. R.....Jackson
Edmonds, J. M.....Horton
Enders, W. H. .....Jackson
Finton, Walter L.....Jackson
Finton, W. R.....Jackson
Foust, W. L.....Grass Lake
Gibson, F. J.....Jackson
Glover, H. G.....Jackson
Gordon, D. L.....Jackson
Greenbaum, Harry .....Jackson
Hackett, T. E.....Jackson
Hanft, Cyril F.....Springport
Hanna, R. J.....Jackson
Hardie, G. O.....Jackson
Harris, Lester J. .....Jackson
Hicks, Glenn C.....Jackson
Holst, John B. .....Jackson
Hungerford, P. R.....Concord
Huntley, W. B.....Jackson
Hurley, H. L.....Jackson
Keefer, A. H.....Concord
Kudner, Don F.....Jackson
Kugler, J. C.....Jackson
Lake, William H.....Jackson
Lathrop, William W.....Jackson
*LaVictoire, I. N. ..San Diego, Calif.
Leahy, E. O.....Jackson
Leonard, Clyde A.....Jackson
Lewis, E. F.....Jackson
Ludwick, J. E.....Jackson
McGarvey, W. E.....Jackson
McLaughlin, M. J.....Jackson
Meade, Wm. H. .....East Lansing
Meads, J. B.....Jackson
Miller, J. L.....Jackson
Munro, C. D.....Jackson
Munro, James E.....Jackson
Murphy, B. M.....Jackson
Newton, R. E.....Jackson
Nichols, R. H.....Leslie
O'Meara, James J.....Jackson
Otis, Grant L.....Jackson
Payne, Andrew K.....Jackson
Peterson, E. S.....Jackson
Porter, H. W.....Jackson
Pray, Frank F.....Jackson
Pray, George R.....Jackson
Ransom, F. G.....Jackson
Riley, Philip.....Jackson
Roberts, Arthur J.....Jackson
Schepeler, Courtland W.....Brooklyn
Scheurer, Peter Arthur....Manchester
Schmidt, T. E.....Jackson
Scott, John.....Jackson
Seybold, George A.....Jackson
Shaeffer, A. M.....Jackson
Sirhal, Alfred M.....Brooklyn
Smith, Dean W.....Jackson
Speck, John W.....Jackson
Spicer, W. E.....Jackson
Stewart, L. L.....Jackson
Sugar, Samuel.....Jackson
Susskind, M. V.....Jackson
Tate, Cecil E. .....Jackson
Thayer, E. A.....Jackson
Thalner, L. F.....Jackson
Townsend, J. W. ...Vandercook Lake
Tuthill, F. S.....Concord
Van Schoick, J. D.....Hanover
Van Schoick, Frank.....Jackson
Vivirski, Edward E.....Jackson
Wertenberger, M. D.....Jackson
Wholihan, John W...Michigan Center
Wickham, W. A.....Jackson
Wilson, E. D. .....Cement City
Wilson, E. G.....Jackson
Wilson, N. D.....Jackson
Winter, G. E.....Jackson

## Kalamazoo County

Aach, Hugo.....Kalamazoo
Adams, R. U.....Kalamazoo
Alexander, C. A.....Kalamazoo
Andre, Harvey M. .....Kalamazoo
Andrews, Sherman.....Kalamazoo
Armstrong, Robert J.....Kalamazoo
Banner, Lawrence R.....Kalamazoo
Barnebee, J. Hosea .....Kalamazoo
Barnebee, J. W.....Kalamazoo
Barrett, F. Elizabeth.....Kalamazoo
Behan, Gerald W.....Galesburg
Bennett, Charles L.....Kalamazoo
*Bennett, Keith .....Fort Custer
Berry, J. F.....Kalamazoo
Bodmer, H. C.....Kalamazoo
Borgman, Wallace.....Kalamazoo
Boys, C. E.....Kalamazoo
Brooks, Ervin D.....Kalamazoo
Burns, J. T.....Kalamazoo
Caldwell, George H.....Kalamazoo
Cobb, Horace R.....Kalamazoo
Cook, R. G.....Kalamazoo
*Crane, W. B. .....Fort Custer
Crawford, Kenneth.....Kalamazoo
Dean, Ray.....Three Rivers
Den Bleyker, Walter.....Kalamazoo
DeWitt, L. H.....Kalamazoo
Dowd, B. J.....Kalamazoo
Doyle, F. M.....Kalamazoo
Ertell, William Francis.....Kalamazoo
Fast, R. B.....Kalamazoo
Fopeano, John V.....Kalamazoo
Fulkerson, C. B.....Kalamazoo
Fuller, R. T.....Kalamazoo
Fuller, Paul.....Kalamazoo
Gerstner, Louis.....Kalamazoo
Gilding, Joseph .....Vicksburg
Glenn, Audrey.....Kalamazoo
Grant, Frederick E.....Kalamazoo
Gregg, Sherman.....Kalamazoo
Harter, Randolph S.....Schoolcraft
Heersma, H. S.....Kalamazoo
Hildreth, R. C.....Kalamazoo
Hodgman, Albert B.....Kalamazoo
Hoebeke, William G.....Kalamazoo
Holder, Charles.....Kalamazoo
Howard, W. H.....Galesburg
Hubbell, R. J.....Kalamazoo
Huyser, William C.....Kalamazoo
Ilgenfritz, F. M.....Kalamazoo
Irwin, William D.....Kalamazoo
Jackson, John B.....Kalamazoo
Jennings, W. O.....Kalamazoo
Kavanaugh, William R.....Kalamazoo
Kenzie, W. N. .....Battle Creek
Klerk, W. J.....Kalamazoo
Koestner, Paul.....Kalamazoo
Kuhs, Milton L. .....Kalamazoo
Lambert, R. H.....Kalamazoo
Lang, W. W.....Kalamazoo
Lavender, Howard.....Kalamazoo
Light, Richard Upjohn.....Kalamazoo
Light, S. Rudolph .....Kalamazoo
Littig, John.....Kalamazoo
MacGregor, J. R.....Kalamazoo
Malone, James G.....Kalamazoo
Marshall, Don.....Kalamazoo
McCarthy, J. S.....Kalamazoo
McIntyre, Charles H.....Kalamazoo
McNair, Rush.....Kalamazoo
Moe, Carl Rex .....Kalamazoo
Morter, Roy A.....Kalamazoo
*Nell, E. R. .....Fort Sill, Okla.
Nibbelink, Benjamin.....Kalamazoo
Okum, M. H. .....Kalamazoo
Osborne, Charles E.....Vicksburg
Patmos, Martin .....Kalamazoo
Peelen, J. W.....Kalamazoo
Peelen, Matthew.....Kalamazoo
Perry, Clifton.....Kalamazoo
Prentice, Hazel R.....Kalamazoo
Pullon, A. E. .....Kalamazoo
Rickert, John A.....Allegan
Rigterink, G. H.....Kalamazoo
Rigterink, H. A.....Kalamazoo
Robson, Verna L.....Oshtemo Springs
Rockwell, A. H.....Kalamazoo
Rockwell, Donald C.....Kalamazoo
Ryan, F. C. .....Kalamazoo
Sage, E. D.....Kalamazoo
Scholten, D. J.....Kalamazoo
Scholten, William.....Kalamazoo
Schrier, C. M.....Kalamazoo
Schrier, Paul.....Kalamazoo
Schrier, Thomas.....Comstock
Scott, William A.....Kalamazoo
Sears, H. A.....Kalamazoo
Shackleton, William E.....Kalamazoo
Shepard, Benjamin A.....Kalamazoo
Shook, R. W.....Kalamazoo
Simpson, B. A.....Kalamazoo
Sofen, Morris B.....Kalamazoo
Southworth, M. N.....Schoolcraft
Stryker, Homer H.....Kalamazoo
Upjohn, E. Gifford.....Kalamazoo
Upjohn, L. N.....Kalamazoo
Van Ness, J. Howard .....Allegan
Van Urk, Thomas.....Kalamazoo
Ver Hage, Martin .....Kalamazoo
Volderauer, John C.....Kalamazoo
Wagar, Carl.....Kalamazoo
*Wagenaar, E. H. .....
.....Fort Benj. Harrison, Indiana
Walker, Burt D.....Kalamazoo
Weirich, Richard.....Marcellus
Westcott, L. E.....Kalamazoo
Wilbur, E. P.....Kalamazoo
Youngs, A. S.....Kalamazoo
Youngs, C. A.....Kalamazoo

## Kent County

*Adams, F. A. .....San Diego, Calif.
Aitken, George T.....Grand Rapids
Alfenito, Felix S. .....Grand Rapids
Allen, R. V.....Grand Rapids
Bachman, G. A.....Grand Rapids
Baert, George H.....Grand Rapids
Baker, Abel J.....Grand Rapids
Ballard, M. S.....Grand Rapids
Batts, Martin .....Grand Rapids
Beeman, Carl B.....Grand Rapids
Beeman, C. E.....Grand Rapids
Beets, W. Clarence.....Grand Rapids
Bell, Charles M.....Grand Rapids
Bettison, William L.....Grand Rapids
Billings, Elton P.....Grand Rapids
Blackburn, Henry M. ...Grand Rapids
Bloxsom, P. W.....Grand Rapids
Bobczynski, Wilhelmina Grand Rapids
Boelkins, Richard C.....Grand Rapids
Boet, F. A.....Grand Rapids
*Boet, John .....Alexandria, La.
Bond, George Lewis.....Grand Rapids
Bosch, L. C.....Grand Rapids
Brace, Fred.....Grand Rapids

Brayman, C. W.....Cedar Springs
Brennecke, Frances E. ..Grand Rapids
Brink, Russel.....Grand Rapids
Brook, Jacob D.....Grandville
Brotherhood, J. S.....Grand Rapids
Buesing, O. R.....Grand Rapids
Bull, Frank L.....Sparta
Burleson, John S.....Grand Rapids
Burling, Wesley.....Grand Rapids
Butler, William J.....Grand Rapids
Byers, Earl J. .....Grand Rapids
Campbell, Alexander McKenzie .....Grand Rapids
Carpenter, Luther Clarendon .....Grand Rapids
Chadwick, W. L.....Grand Rapids
Chamberlain, L. H.....Grand Rapids
Chandler, Donald.....Grand Rapids
Clapp, Henry W.....Grand Rapids
Claytor, R. W.....Grand Rapids
Collisi, H. S.....Grand Rapids
Colvin, W. G.....Grand Rapids
Corbus, Burton R.....Grand Rapids
Cosgrove, Wm. J.....Grand Rapids
Crane, Charles V.....Grand Rapids
Crane, Harold D.....Grand Rapids
Cuncannan, M. E. .....Grand Rapids
Currier, F. P.....Grand Rapids
Dales, Ernest W.....Grand Rapids
Damstra, H. J.....Grand Rapids
Davis, D. B.....Grand Rapids
Dean, Alfred W.....Grand Rapids
De Boer, Guy William...Grand Rapids
Dell, E. E.....Sand Lake
DeMaagd, Gerald.....Rockford
DeMol, Richard J.....Grand Rapids
Denham, R. H.....Grand Rapids
De Pree, Isla G.....Grand Rapids
De Pree, Joseph.....Grand Rapids
DeVel, Leon.....Grand Rapids
De Vries, Daniel.....Grand Rapids
Dewar, M. M.....Grand Rapids
DeYoung, Thies .....Sparta
Dick, Mark W.....Grand Rapids
Dickstein, Bernard.....Grand Rapids
Dixon, Willis L.....Grand Rapids
Doran, Frank .....Grand Rapids
Droste, James C.....Grand Rapids
DuBois, William J.....Grand Rapids
Eaton, Robert M.....Grand Rapids
Eggleston, H. R.....Grand Rapids
*Farber, Charles E. .....Detroit
Faust, L. W.....Grand Rapids
Ferguson, Lynn A.....Grand Rapids
Ferguson, Ward S.....Grand Rapids
Ferrand, L.....Rockford
Fitts, Ralph L.....Grand Rapids
Flynn, J. D.....Grand Rapids
Foshee, J. C.....Grand Rapids
*Frantz, C. R. .....Alexandria, La.
Franzen, Nils A. .....Grand Rapids
*Freyling, Robert ...San Diego, Calif.
Fuller, E. H.....Grand Rapids
Gaikema, E. W.....Grand Rapids
Geenen, C. J.....Grand Rapids
Gilbert, R. H.....Grand Rapids
Gillett, O. H.....Grand Rapids
Grant, Lee O.....Grand Rapids
Graybiel, George P.....Caledonia
Griffith, L. S.....Grand Rapids
Haeck, Wm. .....Grand Rapids
Hagerman, D. B.....Grand Rapids
Hammond, T. W. .....Grand Rapids
Hayes, L. W.....Howard City
Heetderks, Dewey R.....Grand Rapids
Hegsted, Ralph B. .....Grand Rapids
Henry, James, Jr.....Grand Rapids
Herrick, Ruth.....Grand Rapids
Hill, A. Morgan.....Grand Rapids
*Hilt, Lawrence M....Great Lakes, Ill.
Hodgen, J. T.....E. Grand Rapids
Holcomb, J. W.....Grand Rapids
Holdsworth, M. J.....Grand Rapids
Holkeboer, Henry D. ..Grand Rapids
Hollander, Stephen.....Grand Rapids
Hoogerhyde, Jack.....Grand Rapids
Hufford, A. R.....Grand Rapids
Hunderman, Edward....Grand Rapids
Hutchinson, Robert J....Grand Rapids
Hyland, W. A.....Grand Rapids
Ingersoll, C. F.....Grand Rapids
Irwin, Thomas C.....Grand Rapids
Jameson, Fred M.....Grand Rapids
Jaracz, W. J.....Grand Rapids
*Kelly, Robert E. .....Detroit
Kemmer, Thomas R.....Grand Rapids
Kendall, Eugene L.....Grand Rapids
Klaus, C. D.....Grand Rapids
Kniskern, P. W.....Grand Rapids
Kooistra, Henry P.....Grand Rapids
Kremer, John.....Grand Rapids
Kreulen, H. J.....Grand Rapids
Kriekard, P. J.....Grand Rapids
Krupp, C. G.....Grand Rapids
Laird, Robert G.....Grand Rapids
Lamb, George F.....Grand Rapids
Lanning, N. E.....Grand Rapids
Lanting, D. B.....Grand Rapids
Le Roy, Simeon.....Grand Rapids
Lieffers, Harry.....Grand Rapids
Lyman, William D.....Grand Rapids
MacDonell, James A.....Lowell
*Marrin, M. M.....Fort Bliss, Texas
Marsh, J. P.....Grand Rapids
Maurits, Reuben.....Grand Rapids
McKenna, J. L.....Grand Rapids
McKinlay, L. M.....Grand Rapids
McRae, John H.....Grand Rapids
Meengs, Jacob Earl.....Grand Rapids
Mehney, Gayle H.....Grand Rapids
Miller, J. Duane.....Grand Rapids
Miller, John J.....Marne
Mitchell, H. C.....Grand Rapids
Mitchell, W. B.....Grand Rapids
Moen, Cornetta G.....Grand Rapids
Moleski, Leo .....Grand Rapids
*Moleski, Stanley L...Great Lakes, Ill.
Moll, Arthur M.....Grand Rapids
Mollman, Arthur.....Grand Rapids
Moore, Vernor M.....Grand Rapids
Mulder, J. D.....Grand Rapids
Murphy, M. J.....Grand Rapids
Nelson, A. R.....Grand Rapids
Nesbitt, E. N. .....Wyoming Park
Noordewier, Albert.....Grand Rapids
Northouse, Peter B.....Grandville
Northrup, William.....Grand Rapids
Nyland, Albertus.....Grand Rapids
Oliver, W. W.....Grand Rapids
Osborne, Howard.....Grand Rapids
Paalman, Russell J.....Grand Rapids
Patterson, P. Wilfred....Grand Rapids
Pedden, J. R., Jr.....Grand Rapids
Phillips, J. W.....Grand Rapids
Pyle, Henry J.....Grand Rapids
Quigley, Ruth E.....Grand Rapids
Ralph, L. Paul.....Grand Rapids
Reed, Torrance.....Grand Rapids
Reus, William F.....Jamestown
Rigterink, J. W.....Grand Rapids
Riley, G. L.....Grand Rapids
Roberts, Mortimer E.....Grand Rapids
Robinson, Harold C.....Grand Rapids
Rodgers, W. L.....Grand Rapids
Rogers, John R.....Grand Rapids
Roth, Emil M.....Grand Rapids
Schermerhorn, L. J.....Grand Rapids
Schnoor, E. W.....Grand Rapids
Schuitema, Donald .....Grand Rapids
Sculley, Ray E.....Grand Rapids
Seidel, Karl E. .....Grand Rapids
Sevensma, Elisha S.....Grand Rapids
Sevey, L. E.....Grand Rapids
Shepard, B. H.....Lowell
Shellman, Millard W.....Grand Rapids
Slemons, C. C. .....Grand Rapids
Smith, A. B.....Grand Rapids
Smith, Ferris N.....Grand Rapids
Smith, R. Earle.....Grand Rapids
Snapp, Carl F.....Grand Rapids
Snyder, Clarence.....Grand Rapids
Southwick, George H.....Grand Rapids
Steffensen, W. H.....Grand Rapids
Stonehouse, G. G.....Grand Rapids
Stover, Virgil E.....Grand Rapids
Stuart, Gerhardus J.....Grand Rapids
Sugg, Cullen E.....Grand Rapids
Sus Strong, Carl A.....Grand Rapids
Swenson, H. C.....Grand Rapids
Ten Have, J.....Grand Rapids
Tesseine, A. J.....Grand Rapids
Teusink, J. H.....Cedar Springs
Thompson, Archibald B..Grand Rapids
Thompson, P. L.....Grand Rapids
Tidey, Marcus B.....Grand Rapids
Tiffany, Joseph C.....Grand Rapids
Torgerson, William R...Grand Rapids
Van Belois, Harvard J...Grand Rapids
Van Bree, R. S.....Grand Rapids
VanDuine, H. J.....Byron Center
Vann, N. S.....Grand Rapids
Van Noord, Gelmer A...Grand Rapids
Van Solkema, Andrew...Grand Rapids
Van Solkema, Arthur.....Grandville
Van Woerkom, Daniel...Grand Rapids
Veldman, Harold E.....Grand Rapids
Veenboer, William H....Grand Rapids
Venema, Jay R.....Grand Rapids
Vis, William R.....Grand Rapids
Vyn, J. D.....Grand Rapids
Warnshuis, Frederick C. .....Washington, D. C.
Webb, Rowland.....Grand Rapids
Webber, Jerome.....Grand Rapids
Webster, G. W.....Grand Rapids
Wedgewood, L. G.....Grandville
Wells, Merrill.....Grand Rapids
Wenger, A. V.....Grand Rapids
Wenger, John N.....Coopersville
Westrate, Paul.....Grand Rapids
*Whalen, John M. ..San Diego, Calif.
Whinery, Joseph B.....Grand Rapids
Willits, P. W.....Grand Rapids
Wilson, Wm. E. .....Grand Rapids
Winter, Garrett E.....Grand Rapids
Woodburne, A. R.....Grand Rapids
Wright, John M.....Grand Rapids
Yegge, J. P.....Kent City

## Lapeer County

Best, Herbert M.....Lapeer
Bishop, G. Clare.....Almont
Burley, David H.....Almont
Chapin, Clarence D.....Columbiaville
Dorland, Clark .....Lapeer
Hanna, Frederick R.....Lapeer
Johnson, Howard R.....Imlay City
McBride, J. R.....Lapeer
McLeod, K. W. A.....Lapeer
Merz, Henry G.....Lapeer
O'Brien, Daniel J.....Lapeer
Shrom, Howard K. .....Imlay City
Thomas, J. Orville.....North Branch
Tinker, F. A.....Lapeer
Zemmer, H. B.....Lapeer

## Lenawee County

Abraham, A. O.....Hudson
Beebe, I. J.....Morenci
Blanchard, L. E.....Hudson
Bland, J. P.....Adrian
Blanden, Merwin R. .....Tecumseh
*Campbell, C. A. .....Detroit
Case, C. W.....Onsted
Chase, Artemus W.....Adrian
Clark, A. D.....Adrian
Claxton, W. T.....Britton
Colbath, W. E.....Adrian
Hall, George C.....Adrian
Hammel, H. H.....Tecumseh
Hardy, P. B.....Tecumseh
Heffron, Howard H.....Adrian
Helzerman, Ralph F.....Tecumseh
Hewes, A. B.....Adrian
Hornsby, W. B.....Clinton
Howland, F. A.....Adrian
Hulick, Peter V. .....Adrian
Iler, Harris D.....Clinton
Jewett, William E., Jr.....Adrian
Lamley, Arthur E.....Blissfield
Loveland, Horace H.....Tecumseh
MacKenzie, W. S.....Adrian
McGarvey, Maurice R.....Blissfield
*Marsh, R. G. B. ....Alexandria, La.
*Miller, Perry Lynford.....Detroit
Morden, Esli T.....Adrian
Murawa, V. J. .....Deerfield
Pasternacki, Arthur S. .....Adrian
Patmos, Bernard.....Adrian
Peters, W. L.....Morenci
Raabe, E. C.....Morenci
Rawson, A. P.....Addison
Spalding, A. L.....Hudson
Stafford, Leo J.....Adrian
Tubbs, R. V.....Blissfield
VanDusen, C. A.....Blissfield
Whitney, O.....Adrian
Wood, A. C.....Adrian
Wynn, G. H.....Adrian

## Livingston County

Brigham, Jeannette ..... Howell
Burnett, Paul C. ..... Howell
Burt, K. L. ..... Howell
Cameron, Duncan A. ..... Brighton
Duffy, Ray M. ..... Pinckney
Finch, E. D. ..... Howell
Gamble, Shelby O. ..... Howell
Glenn, Bernard H. ..... Fowlerville
Hayner, R. A. ..... Howell
Hendren, J. J. ..... Fowlerville
Hill, Harold C. ..... Howell
Huntington, H. G. ..... Howell
Leslie, G. L. ..... Howell
Lojacono, Salvatore ..... Howell
McDowell, Guy Marshall ..... Howell
McIndoe, R. Bruce ..... Howell
Sigler, Hollis L. ..... Howell
Stephens, D. C. ..... Howell

## Luce County

Berghorst, John ..... Newberry
Bohn, Frank P. ..... Newberry
Campbell, Earl H. ..... Newberry
Gibson, Robert E. ..... Newberry
Orr, A. C. ..... Newberry
Perry, Henry E. ..... Newberry
Purmort, William R., Jr. ..... Newberry
Rehn, Adolph T. ..... Newberry
Spinks, Robert Earl ..... Newberry
*Surrell, M. A. ..... Alexandria, La.
Swanson, George F. ..... Newberry
Toms, Charles B. ..... Newberry

## Macomb County

Allen, Leroy K. ..... Roseville
Bailey, R. ..... St. Clair Shores
Banting, O. F. ..... Richmond
Barker, John G. ..... Center Line
Berry, Henry G. ..... Mt. Clemens
Bower, A. B. ..... Armada
Caster, E. Wilbur ..... Mt. Clemens
Crawford, A. M. ..... Mt. Clemens
Croman, Joseph M., Jr. ..... Mt. Clemens
Croman, Joseph M., Sr. ..... Mt. Clemens
Deurloo, Henry W. ..... Romeo
Dudzinski, Edmund J. ..... New Baltimore
Engels, J. A. ..... Richmond
Fluemer, Oswald ..... Mt. Clemens
Hawley, R. E. ..... St. Clair Shores
Heine, A. ..... Mt. Clemens
Kane, William J. ..... Mt. Clemens
Lane, W. D. ..... Romeo
Lynch, Russell E. ..... Center Line
McGuire, A. J. ..... Utica
Moore, G. F. ..... Mt. Clemens
Mulligan, P. T. ..... Mt. Clemens
Reichman, Joseph J. ..... Mt. Clemens
Reitzel, R. H. ..... Mt. Clemens
Rivard, Charles L. ..... St. Claire Shores
Roth, G. E. ..... Armada
Rothman, A. M. ..... East Detroit
Ruedisueli, Clarence A. ..... Roseville
Salot, R. F. ..... Mt. Clemens
Scher, Joseph N. ..... Mt. Clemens
Seaman, John H. ..... New Haven
Sibrans, William A. ..... East Detroit
Siegfried, E. G. ..... New Haven
Smith, Milton C. ..... Mt. Clemens
Stone, Elizabeth A. ..... Romeo
Sturm, Fred A. ..... St. Clair Shores
Thompson, A. A. ..... Mt. Clemens
Ullrich, R. W. ..... Mt. Clemens
*Wellard, Henry G. ..... Alexandria, La.
Wilde, M. M. ..... Warren
Wiley, Bruce ..... Utica
Wiley, Herbert H. ..... Utica
Wolfson, Victor H. ..... Mt. Clemens

## Manistee County

Bryan, Kathryn M. ..... Manistee
Grant, C. L. ..... Manistee
Hansen, E. C. ..... Manistee
Konopa, John F. ..... Manistee
Lewis, Lee A. ..... Manistee
Lindquist, Paul ..... Manistee
MacMullen, Harlen ..... Manistee
Miller, E. B. ..... Manistee
Norconk, Ward H. ..... Bear Lake
Oakes, Ellery A. ..... Manistee
Ogilvie, G. D. ..... Manistee
Quinn, Henry M. ..... Copemish
Ramsdell, Homer A. ..... Manistee
Whitley, Alec ..... Bear Lake

## Marquette-Alger Counties

Bennett, Arthur K. ..... Marquette
Berry, Robert F. ..... Marquette
Bertucci, J. P. ..... Ishpeming
Blake, H. P. ..... Bergland
Bottum, Charles N. ..... Marquette
Burke, R. A. ..... Palmer
Casler, W. L. ..... Marquette
Conrad, George A. ..... Marquette
Cooperstock, M. ..... Marquette
Corcoran, W. A. ..... Ishpeming
Elzinga, E. R. ..... Marquette
Erickson, Arvid W. ..... Ishpeming
Fennig, F. A. ..... Marquette
Hanelin, H. A. ..... Marquette
Hartt, P. P. ..... Ishpeming
Hirwas, C. L. ..... Marquette
Hornbogen, D. P. ..... Marquette
Janes, R. Grant ..... Marquette
Keskey, George I. ..... Marquette
Lambert, W. C. ..... Marquette
LeGolvan, C. ..... Marquette
McCann, Neal J. ..... Ishpeming
McIntyre, D. R. ..... Negaunee
Mudge, W. A. ..... Negaunee
Nicholson, J. B. ..... Marquette
Niemi, O. I. ..... Marquette
Paull, Frank O. ..... Marquette
Picotte, Wilfrid S. ..... Ishpeming
Robbins, Nelson J. ..... Negaunee
Schutz, W. J. ..... Munising
Stevenson, Theodore D. ..... Ishpeming
Swinton, A. L. ..... Marquette
Talso, Jacob ..... Ishpeming
Van Riper, Paul ..... Champion
Waldie, George M. ..... Ishpeming
Westcott, Royal ..... Morgan Heights
Wickstrom, George ..... Munising
Witters, Josef E. ..... Gwinn

## Mason County

Blanchette, Victor J. ..... Cluster
Goulet, L. J. ..... Ludington
Martin, W. S. ..... Ludington
Paukstis, Charles ..... Ludington

## Mecosta-Osceola-Lake Counties

Bruggema, Jacob ..... Evart
Campbell, James B. ..... Big Rapids
Chess, Leo F. ..... Reed City
Franklin, Benjamin L. ..... Remus
Grieve, Glenn ..... Big Rapids
Hall, Clifton ..... Big Rapids
Kilmer, Paul B. ..... Reed City
Klein, J. Paul ..... Reed City
MacIntyre, Donald ..... Big Rapids
McGrath, V. J. ..... Reed City
Phillips, R. W. ..... Remus
Treynor, Thomas P. ..... Big Rapids
Yeo, Gordon H. ..... Big Rapids

## Menominee County

DeWane, F. J. ..... Menominee
Flanagan, Clarence B. ..... Menominee
*Heidenreich, John R. ..... San Antonio, Texas
Jones, William S. ..... Menominee
Kaye, J. T. ..... Menominee
Kerwell, K. C. ..... Stephenson
Mason, Stephen C. ..... Menominee
Montgomery, Robert ..... Hermansville
Peterson, A. R. ..... Daggett
Sawbridge, Edward ..... Stephenson
Scully, John C. ..... Menominee
Sethney, Henry T. ..... Menominee
Towey, J. W. ..... Powers

## Midland County

Ballmer, Robert S. ..... Midland
Gay, Harold Howard ..... Midland
Grewe, N. C. ..... Midland
High, C. V., Jr. ..... Midland
Howe, Irvin M. ..... Midland
Linsenmann, Karl W. ..... Midland
MacCallum, Charles ..... Midland
Meisel, Edward H. ..... Midland
Pike, Melvin H. ..... Midland
Rice, Robert E. ..... Midland
Schriack, Ray ..... Midland
Sherk, J. H. ..... Midland
Sjolander, Gust ..... Midland
Towsley, W. D. ..... Midland
Von Haitinger, Kalmon S. ..... Midland

## Monroe County

Acker, William F.....Monroe
Ames, Florence .....Monroe
Balk, A. C. .....Monroe
Barker, Vincent L.....Monroe
Blakey, L. C.....Monroe
Bond, W. W.....Monroe
Cooper, E. M.....Rockwood
Denman, D. C.....Monroe
Dusseau, S. V.....Erie
Ewing, R. T.....Monroe
Fieldhouse, B. J.....Ida
Flanders, J. P.....Monroe
Gelhaus, William J.....Monroe
Golinvaux, C. J.....Monroe
*Goodman, Louis..San Antonio, Texas
Heffernan, John F.....Carleton
Humphrey, J. A. .....Monroe
Hunter, M. A.....Monroe
Johnson, A. Esther.....Monroe
Landon, Herbert W.....Monroe
Long, Edgar C.....Monroe
Long, Sara .....Monroe
McDonald, T. A.....Monroe
McGeoch, R. W.....Monroe
McMillin, J. H.....Monroe
Morely, Louise .....Monroe
Parmelee, O. E.....Lambertville
Pinkus, H. K.....Monroe
Reisig, A. H.....Monroe
Sanger, Emerson J. .....Monroe
Siffer, J. J.....Monroe
Smith, William A.....Petersburg
Stolpestad, C. T.....Monroe
Tomlinson, Ledyard.....New Port
Wagar, Spencer .....Rockwood
Williams, Robert J.....Monroe
Williamson, George W. .....Dundee

## Muskegon County

Anderson, A. J.....Muskegon
August, R. V.....Muskegon Heights
Bartlett, F. H.....Muskegon
Beers, Charles .....Holton
Benedict, A. L.....Muskegon
Bloom, C. J.....Muskegon
Boyd, D. R.....Muskegon
Bradshaw, Park S.....Muskegon
Chapin, William S...Muskegon Heights
Closz, H. F.....Muskegon
Cohan, Sol G.....Muskegon
Colignon, C. M.....Muskegon
Collier, C. C.....Whitehall
D'Alcorn, Ernest .....Muskegon
Dasler, A. F.....Muskegon Heights
Derezinski, Clement F.....Muskegon
Diskin, Frank.....Muskegon
Douglas, Robert .....Muskegon
Durham, C. J.....Muskegon
Dykhuisen, Harold D.....Muskegon
Eckerman, C. T.....Muskegon
Fillingham, Enid .....Muskegon
Fleischman, C. B.....Muskegon
Fleishman, Norman.....Muskegon
Foss, Edward O.....Muskegon
Garber, F. W., Jr.....Muskegon
Garland, J. O.....Muskegon
Gillard, James .....Muskegon
Goltz, Martha H.....Montague
Griffith, Robert M. .....Muskegon
Hagen, Wm. A. .....Muskegon
Hannum, F. W.....Muskegon
Harrington, A. F.....Muskegon
Harrington, R. J.....Muskegon
Hartwell, S. W.....Muskegon
Heneveld, John.....Muskegon
Holly, Leland E.....Muskegon
Holmes, Roy H.....Muskegon
Jackson, S. A.....Muskegon
Kane, Thomas J.....Muskegon
Keilin, Marie .....Muskegon
Kerr, H. J.....Muskegon
Kniskern, E. L.....Muskegon
LaCore, O. M.....Muskegon Heights
Lange, E. W.....Muskegon
Lauretti, Emil.....Muskegon
Laurin, V. Samuel.....Muskegon
LeFevre, George L.....Muskegon
*LeFevre, Louis .....Sparta, Wis.
LeFevre, William M.....Muskegon
Loomis, John L.....Muskegon
Loughery, H. B.....Muskegon
Mandeville, C. B.....Muskegon
Medema, Paul E.....Muskegon
Meengs, M. B.....Muskegon Heights
Miller, Philip L.....Muskegon
Morford, F. N.....Muskegon
Morse, Bertram W.....Whitehall
Mulligan, A. W.....Muskegon
Oden, Constantine L.....Muskegon
Olson, R. G.....Muskegon Heights
Pangerl, Carl .....Muskegon Heights
Petkus, Antonie ...Muskegon Heights
Pettis, Emmett.....Muskegon
Powers, Lunette .....Muskegon
Price, Leonard.....Muskegon
Pyle, H. J.....Muskegon
Risk, R. A.....Muskegon
Risk, Robert D.....Muskegon
Scholle, N. W.....Muskegon
Spoor, A. A.....Muskegon
Stone, Maxwell E.....Muskegon
Swartout, W. C.....Muskegon
Teifer, Charles A.....Muskegon
Thieme, S. W.....Ravenna
Thornton, E. S.....Muskegon
Wilke, C. A.....Montague
Wilson, P. S.....Muskegon

## Newaygo County

Barnum, W. H.....Fremont
Deur, T. R.....Grant
Edwards, Albert .....Fremont
Geerlings, Lambert .....Fremont
Geerlings, Lewis J.....Fremont
Geerlings, Willis .....Fremont
*Gordon, B. F. .....Fort Custer
Lettinga, D.....Grant
Moore, H. R.....Newaygo
Saxen, Raymond .....White Cloud
Stryker, O. D.....Fremont
Tompsett, Arthur C.....Hesperia

## North Central Counties

### (Otsego-Montmorency-Crawford-Oscoda-Roscommon-Ogemaw-Gladwin-Kalkaska Counties)

Beeby, R. J.....West Branch
Clippert, C. G.....Grayling
Coulter, Keith Douglas.....Gladwin
Crandell, C. H.....West Branch
Drescher, George A.....Lewiston
Egle, Joseph L.....Gaylord
Harris, Levi A.....Gaylord
Hendricks, Henning V.....Kalkaska
Inman, John.....Kalkaska
Jardine, Hugh M.....West Branch
Keyport, C. R.....Grayling
Lanting, Helen E. .....Gladwin
Lanting, Roelof .....Gladwin
LaPorte, Lawrence A.....Gladwin
Martzowka, M. A.....Roscommon
McDowell, Douglas B.....West Branch
McKillop, G. L.....Gaylord
Palm, John .....Pruddenville
Peckham, Richard C.....Gaylord
Sargent, Leland E.....Kalkaska
Skinner, Edward F.....Gaylord
Stealy, Stanley.....Grayling
Thompson, Sue H.....West Branch

## Northern Michigan

### (Antrim-Charlevoix-Cheboygan-Emmet Counties)

Beuker, Bernard .....East Jordan
Blum, Benjamin B.....Petoskey
Burns, Dean C.....Petoskey
Chapman, Wallace M.....Charlevoix
Chapman, Willis Earle.....Cheboygan
Conkle, Guy C.....Boyne City
Conti, Joseph.....Petoskey
Conway, William S.....Petoskey
Duffie, Don Hastings....Central Lake
Frank, Gilbert E.....Harbor Springs
Giffords, Mark .....Charlevoix
Larson, Walter E.....Levering
Lashmet, Floyd H.....Petoskey
Lilga, Harris V.....Petoskey
Litzenburger, A. F.....Boyne City
Maksim, George.....Petoskey
Mast, W. H.....Petoskey
Mayne, Frederick C.....Cheboygan
McCarroll, James C.....Cheboygan
McCune, William Stanley....Petoskey
Palmer, Russell .....St. James
Parks, W. H.....Petoskey
Reed, Wilbur F.....Cheboygan
Rodgers, John .....Bellaire
Saltonstall, Gilbert B.....Charlevoix
Stringham, J. R.....Cheboygan
Van Dellen, Jerrian.....Ellsworth
Winter, Joseph A.....Mackinaw City

## Oakland County

Abbott, V. C.....Pontiac
Arnkoff, Harry .....Royal Oak
Aschenbrenner, Z. R.....Farmington
Baker, Frederick A.....Pontiac
Baker, Robert H.....Pontiac
Barker, Howard B.....Pontiac
Bauer, Ernest W.....Hazel Park
Beattie, W. G.....Ferndale
Beck, Otto O.....Birmingham
Benning, C. H.....Royal Oak
Berg, Richard H. .....Oxford
Borland, Alexander .....Pontiac
Boucher, R. E.....Royal Oak
Bradley, Everett L.....Pontiac
Burke, Chauncey G.....Pontiac
Burt, F. J.....Holly
Butler, Samuel A.....Pontiac
Christie, J. W.....Pontiac
Church, J. E.....Pontiac
Clark, Charles D. .....Royal Oak
Cobb, Leon F.....Pontiac
Cooper, Robert J.....Pontiac
Cottrell, Martha S.....Novi
Couchman, Boyd .....Royal Oak
Crissman, Harold C.....Ferndale
Cudney, Ethan B.....Pontiac
Dahlgren, Carl.....Keego Harbor
Darling, C. G., Jr.....Pontiac
Dobski, Edwin J. .....Pontiac
Ekelund, Clifford T.....Pontiac
Farnham, Lucius Augustine....Pontiac
*Faulconer, Albert .....Rochester
Ferris, Ralph G.....Brimingham
Fitzpatrick, Francis .....Pontiac
Flick, John R.....Royal Oak
Foust, Earl W.....Hazel Park
Fox, John W.....Pontiac
Furlong, Harold A. .....Lansing
Gaensbauer, Ferdinand .....Pontiac
Gariepy, Bernard F.....Royal Oak
Gatley, C. R.....Pontiac
Gatley, L. Warren.....Pontiac
Gehinger, Norman F. .....Pontiac
Geib, Ormond D.....Rochester
Gerls, Frank B.....Pontiac
Gill, Matthew J. .....Detroit
Gordon, J. H.....Birmingham
Grant, William A.....Milford
Green, William M.....Pontiac
Hackett, Daniel Joseph.....Pontiac
Halsted, Lee H.....Farmington

Hammer, Carl W.....Oxford
Hammonds, E. E.....Birmingham
Harris, Landy E.....Pontiac
Harvey, Campbell .....Pontiac
Hassberger, J. B.....Birmingham
Hathaway, Clarence L....Lake Orion
Hathaway, William .....Rochester
Henry, Colonel R.....Ferndale
Hensley, C. B. .....Lake Orion
Howlett, E. V.....Pontiac
Hoyt, D. F.....Pontiac
*Hubert, John R.....Pontiac
Huffman, M. R.....Milford
Hume, T. W. K.....Auburn Heights
Hurst, Daniel D.....Pleasant Ridge
Jones, Morrell M.....Pontiac
Kemp, Felix J.....Pontiac
Kemp, W. Lloyd.....Birmingham
Kukuk, M. R.....Pontiac
Lambie, John S.....Pontiac
Lambert, Alvin Gerald.....Ferndale
Larson, B. T.....Pontiac
Lass, E. H. .....Oxford
Lawler, C. F. .....Birmingham
Lewis, Sol M.....Ferndale
Little, J. W. .....Pontiac
Llewellyn, M. B. .....Pontiac
Lockwood, C. E.....Holly
MacInnis, Francis .....Pontiac
Mackenzie, O. R.....Walled Lake
Margrave, Edmund D.....Royal Oak
Markley, John Martin.....Pontiac
Mason, Robert J.....Birmingham
McConkie, J. P.....Birmingham
McEvoy, Francis J.....Royal Oak
McNeill, H. H.....Pontiac
Meinke, Herman A.....Hazel Park
Mercer, Frank A.....Pontiac
Miller, Raymond E.....Clarkston
Mitchell, B. M.....Pontiac
Monroe, J. D. .....Pontiac
Mooney, C. A.....Ferndale
Neafie, Charles A.....Pontiac
Needle, Francis .....Pontiac
Newcomb, Arnold B.....Berkley
Norup, John .....Berkley
Ohlmacher, A. P.....Royal Oak
Olsen, Richard E.....Pontiac
Osgood, S. W.....Clawson
Pauli, Theodore H.....Pontiac
Pelletier, Charles J.....Hazel Park
Pool, H. H.....Pontiac
Porritt, Ross J.....Pontiac
Ports, Preston W. .....Farmington
Prevette, Isaac C.....Pontiac
Quamme, Roy K. .....Pontiac
Raynale, George P.....Birmingham
Reid, Fred T.....Clawson
Riker, Aaron D.....Pontiac
Roehm, Harold R.....Birmingham
Rooks, Wendell H.....Pontiac
Rowley, Laurie G.....Drayton Plains
Russell, Vincent P.....Royal Oak
St. John, Harold A.....Pontiac
Schneider, Alexander .....Pontiac
Schoenfeld, John B.....Birmingham
Schuneman, Howard .....Ferndale
Seaborn, A. J.....Royal Oak
Sheffield, L. C.....Pontiac
Sherman, George A. .....Lansing
Sibley, H. A.....Pontiac
Simpson, E. K.....Pontiac
Smith, Carleton A.....Pontiac
Smith, Donald S.....Pontiac
Spears, M. L.....Pontiac
Spencer, Lloyd H.....Royal Oak
Spoehr, Eugene L.....Ferndale
Spohn, Earl W.....Royal Oak
Stahl, Harold F.....Oxford
Stanley, William F.....Ferndale
Starker, Clarence T.....Pontiac
Steinberg, Norman.....Royal Oak
Stolpman, A. K.....Birmingham
Sutton, Palmer E.....Royal Oak
Terry, Stuart .....Pontiac
Tuck, Raymond G.....Pontiac
Uloth, Milton J.....Ortonville
Vatz, Jack A. .....Pontiac
Wagley, P. V.....Pontiac
Wagner, Ruth E.....Royal Oak
Watson, Thomas Y. .....Birmingham
Weinberger, Herbert .....Pontiac
Wentz, A. E. .....Birmingham
Williams, H. W.....Pontiac
Yoh, Harry B.....Pontiac
Young, Arthur R.....Pontiac

## Oceana County

Day, Clinton.....Hart
Flint, Charles.....Hart
Hayton, A. R.....Shelby
Heard, William.....Pentwater
Lemke, Walter M.....Shelby
Munger, L. P.....Hart
Nicholson, John H.....Hart
Reetz, Fred A.....Shelby
Robinson, W. Gordon.....Hart
Wood, Merle G.....Hart

## Ontonagon County

Bender, Jesse L.....Mass
Evans, Edwin J.....Ontonagon
Hogue, H. B.....Ewen
McHugh, Frank W.....Ontonagon
Rubinfeld, S. H.....Ontonagon
Shale, R. J.....Ontonagon
Strong, W. F.....Ontonagon
Whiteshield, C. F.....Trout Creek

## Ottawa County

Beernink, E. H.....Grand Haven
Bloemendaal, D. C.....Zeeland
Bloemendal, W. B.....Grand Haven
Boone, Cornelius E.....Zeeland
Bos, G. D.....Holland
Clark, N. H. .....Holland
DeVries, H. C.....Holland
De Witt, S. L.....Grand Haven
DeYoung, Fred.....Spring Lake
Hager, Ralph .....Hudsonville
Harms, H. P.....Holland
Irvin, Harry C.....Holland
Kemme, Gerrit.....Zeeland
Kools, William Clarence ....Holland
Leenhouts, Abraham.....Holland
Long, C. E.....Grand Haven
Nichols, Rudolph H.....Holland
Nykamp, Russell.....Zeeland
Presley, William J.....Grand Haven
Rypkema, Willard M.....Grand Haven
Stickley, A. E.....Coopersville
Tempas, Henry W. .....Coopersville
Ten Have, Ralph.....Grand Haven
Timmerman, E. C.....Coopersville
Van Appledorn, Chester J.....Holland
Ver Duin, J.....Grand Haven
Van Der Berg, E.....Holland
Van der Velde, O.....Holland
Wells, Kenneth.....Spring Lake
Westrate, William.....Holland
Wiersma, Silas C.....Hudsonville
Winter, John K.....Holland
Winter, William G.....Holland

## Saginaw County

Ackerman, Gerald L.....Saginaw
Anderson, W. K.....Saginaw
Bagley, U. S.....Saginaw
Bagshaw, David E.....Saginaw
Berberovich, T. F.....Saginaw
Bishop, H. M.....Saginaw
Brender, Fred P. .....Frankenmuth
Brock, W. H.....Saginaw
Busch, Frank J.....Saginaw
Butler, M. G.....Saginaw
Button, A. C.....Saginaw
Cady, F. J.....Saginaw
Calomeni, Anthony D.....Saginaw
Cameron, Allen K.....Saginaw
Campbell, L. A.....Saginaw
Catizone, R. J.....Merrill
Chisena, Peter R. .....Saginaw
Clark, Wilbert B.....Saginaw
Claytor, Archer A.....Saginaw
Cortopassi, Andre.....Saginaw
Cortopassi, V. E.....Saginaw
Cory, C. W.....Saginaw
Curts, James.....Saginaw
Durman, Donald C.....Saginaw
Ely, C. W.....Saginaw
Ernst, Arthur Randolph.....Saginaw
Eymer, Esther.....Saginaw
Fleschner, Thomas E.....Birch Run
Freeman, Frederick W.....Saginaw
Gage, David P. .....Saginaw
Galsterer, Edwin C.....Saginaw
Goman, Louis D.....Saginaw
Grigg, Arthur.....Saginaw
Grigg, Arthur P.....Saginaw
Hand, Eugene .....Saginaw
Harvie, L. C.....Saginaw
Helmkamp, Herbert C.....Saginaw
Hester, E. G.....Saginaw
Hill, Victor L.....Saginaw
Hohn, Fred J.....Saginaw
*Imerman, Harold M. .....
.....San Antonio, Texas
Jaenichen, R.....Saginaw
James, J. W.....Saginaw
Jiroch, R. S.....Saginaw
Jordan, Leo A.....Saginaw
Keller, S. S.....Saginaw
Kemp, J. M.....Saginaw
Kempton, R. M.....Saginaw
Kirchgeorg, Clemens G...Frankenmuth
Kleekamp, H. G.....Saginaw
Knott, Harriet A.....Saginaw
Ling, Ernest M.....Hemlock
Lohr, O. W.....Saginaw
Longstreet, Martha L.....Saginaw
Luger, F. E.....Saginaw
Lurie, Robert.....Saginaw
MacKinnon, Edwin D.....Saginaw
MacMeekin, James Ware.....Saginaw
Markey, Jos. P. .....Saginaw
Martzowka, William P.....Saginaw
Maurer, John A.....Saginaw
Maurer, J. G. .....Saginaw
Mayne, Harold.....Saginaw
McClinton, N. F.....Saginaw
McGregor, R.....Saginaw
McKinney, Alex. R.....Saginaw
McLandress, Joshua A.....Saginaw
Meyer, Henry J.....Saginaw
Moon, A. R.....Saginaw
Morris, Keith M.....Saginaw
Murphy, Albert P.....Saginaw
Murray, Charles R.....Saginaw
Novy, F. O.....Saginaw
O'Reilly, William J.....Saginaw
Ostrander, Frank W.....Freeland
Phillips, Homer A.....Saginaw
Pietz, Frederick.....Saginaw
Pillsbury, Edward A.....Frankenmuth
Poole, Frank A.....Saginaw
Potvin, Clifford D.....Saginaw
Richards, Ned R.....Saginaw
Richter, Harry J.....Saginaw
Ryan, M. D.....Saginaw
Ryan, R. S. .....Saginaw
Sample, J. T.....Saginaw
Sargent, D. V. .....Saginaw
Schaiberger, Elmer.....Saginaw
Sheldon, S. A.....Saginaw
Skowronski, Casimer A. .....Saginaw
Slack, W. K.....Saginaw
Stander, A. C.....Saginaw
Stewart, George .....Saginaw
Stiller, A. F. .....Saginaw
Stolz, Harold F.....Saginaw
Thomas, Dale.....Saginaw
Thompson, A. B.....Saginaw
Tiedke, G. E.....Saginaw
Toshach, C. E.....Saginaw
*Wallace, Herbert C. .....
..... Alexandria, Louisiana
Wheeler, Dorothy .....Saginaw
Wilson, H. Roy.....Saginaw
Yntema, S.....Saginaw

## Sanilac County

Blanchard, E. W.....Deckerville
Cochran, Lewis E. .....Peck
Gift, W. A. .....Marlette
Hart, R. K. .....Croswell
Koch, D. .....Brown City
Learmont, H. H. .....Croswell
McGunegle, K. T. .....Sandusky
Norgaard, Hal V. .....Marlette
Robertson, Colin G. .....Sandusky
Seager, M. Cole .....Brown City
Tweedie, G. Evans .....Sandusky
Tweedie, S. Martin .....Sandusky
Webster, John C. .....Marlette

Alexander, Reuben G.....Laingsburg
Arnold, Alfred L., Jr.....Owosso
Arnold, A. L., Sr.....Owosso
Backe, John C. .....Corunna
†Bates, L. F.....Durand
*Brandel, J. D. .....
.....Fort Sam Houston, Texas
Brown, Richard J.....Owosso
Camper, T. E. .....Corunna
Carney, Edward J.....Durand

Armsbury, A. B.....Marine City
Atkinson, J. M.....Port Huron
Attridge, J. A.....Port Huron
Banting, K. C. .....Port Huron
Battley, J. C. Sinclair....Port Huron
Beck, Frank K. .....Port Huron
Biggar, R. J.....Port Huron
Borden, C. L.....Yale
Boughner, W. H.....Algonac
Bovee, M. E.....Port Huron
Brush, Howard O.....Port Huron
Burke, Ralph M.....Port Huron
Burley, Jacob H.....Port Huron
Callery, A. L.....Port Huron
Campbell, R. H.....St. Clair
Carey, Lewis M. .....Detroit
Carney, F. V.....St. Clair
Clyne, B. C.....Yale

Berg, Lawrence A.....Centerville
Brunson, A. E.....Colon
Buell, Martin .....Sturgis
Dodrill, F. D. .....Three Rivers
Fiegel, S. A.....Sturgis
Fortner, F. J.....Three Rivers
Hoekman, Aben.....Constantine

Barbour, Harry A.....Mayville
Bates, George.....Kingston
Berman, Harry .....Millington
Cook, Raymond.....Akron
Dickerson, Willard W. .....Caro
Dixon, Robert L. .....Caro
Donahue, H. Theron.....Cass City
*Fisher, Robert E. San Antonio, Texas
Flett, Richard O.....Millington

Boothby, Carl F.....Lawrence
Boothby, F. M.....Lawrence
Bope, William P.....Decatur
French, Merle R.....Paw Paw
Gano, Avison.....Bangor
Giddings, Ralph R.....Bloomingdale
Hall, E. J.....Hartford
Hasty, W. A. .....Gobles
Hoyt, W. F.....Paw Paw

Agate, George H. .....Ann Arbor
Alexander, John .....Ann Arbor
Badgley, C. E.....Ann Arbor
Barker, Paul.....Ann Arbor
Barnwell, John B.....Ann Arbor
Barr, A. S. .....Ann Arbor
Barss, Harold D.....Ypsilanti
Bassow, Paul H.....Ann Arbor
Baugh, R. H. .....Milan
Beebe, Hugh M.....Ann Arbor
Bell, Margaret.....Ann Arbor
Belser, Walter .....Ann Arbor
Bethel, Frank Hartstuff ....Ann Arbor
*Blair, Thomas H. .....Fort Custer
Brace, William M.....Ann Arbor
Breakey, J. F. .....Ann Arbor
Breakey, James R.....Ypsilanti
Britton, H. B.....Ypsilanti
Brown, Phillip .....Ypsilanti
Bruce, James D. .....Ann Arbor
Bulmer, Dan J.....Ann Arbor
Buscaglia, C. J.....Ypsilanti
Camp, Carl Dudley.....Ann Arbor
Campbell, Darrell A. .....Ann Arbor
Catron, Lloyd F. .....Akron, Ohio
Clements, Glenn T.....Ann Arbor
Coller, Frederick A.....Ann Arbor
Conn, Jerome W.....Ann Arbor
Cooper, Ralph Ruehl .....Ann Arbor
Coxon, Alfred W.....Ann Arbor
Cummings, H. H.....Ann Arbor
Curtis, Arthur C.....Ann Arbor

†Deceased April 5, 1941

## Shiawassee County

Cramer, George L. G.....Owosso
Crane, C. A. .....Corunna
Fillinger, W. B.....Ovid
Greene, I. W.....Owosso
Hume, Arthur M.....Owosso
Hume, Harold A.....Owosso
Janci, Julius.....Owosso
Kaufman, H. J.....Owosso
Linden, V. E.....Durand
McKnight, E. R. .....Owosso

## St. Clair County

Cooper, T. H.....Port Huron
DeGurse, T. E.....Marine City
Derck, W. P.....Marysville
Falk, Edwin Carl.....Algonac
Fraser, Robert C.....Port Huron
Heavenrich, Theodore F...Port Huron
Holcomb, R. J.....Marine City
Kesl, George Matthew....Port Huron
Le Galley, K. B.....Port Huron
Licker, R. R.....Port Huron
Ludwig, F. E.....Port Huron
McCue, Christopher.....Goodells
MacPherson, C. A.....St. Clair
Martin, C. S.....Port Huron
McColl, D. J.....Port Huron
McColl, Neil J.....Port Huron
Meredith, E. W.....Port Huron
Patterson, D. Webster....Port Huron

## St. Joseph County

Holm, Arvid G.....Three Rivers
Kane, David M.....Sturgis
Miller, C. G.....Sturgis
Parrish, Marion F.....Sturgis
Pennington, H. C.....White Pigeon
Raisch, Fred J.....White Pigeon
Reed, Fred R.....Three Rivers

## Tuscola County

Fox, Denton B. .....Caro
Gugino, Frank James.....Reese
Hoffman, T. E.....Vassar
Howlett, R. R.....Caro
Johnson, O. G.....Mayville
Kaven, G. H.....Unionville
MacRae, L. D.....Gagetown
Merrill, Elmer H.....Caro
Morris, Frank L.....Cass City

## Van Buren County

Iseman, Joseph W. .....Paw Paw
Itzen, J. F.....South Haven
Kingma, J. G.....Decatur
Laird, Emma.....Paw Paw
Lowe, Edwin G.....Bangor
Maxwell, J. Charles.....Paw Paw
McNabb, A. A.....Lawrence
Murphy, Norman D.....Bangor
Penoyar, C. L.....South Haven

## Washtenaw County

Davis, Fenimore E.....Ann Arbor
DeAlvarez-Skinner, Russell R....
..... Ann Arbor
De Jong, Russell.....Ann Arbor
DeRyke, Gilbert R. .....Ann Arbor
De Tar, John S.....Milan
Dingman, Reed O. .....Ann Arbor
Donaldson, S. W.....Ann Arbor
*Dowman, Charles E....Anniston, Ala.
Dunstone, H. C.....Ypsilanti
Emerson, Herbert W.....Ann Arbor
Everett, Meldon.....Ann Arbor
Failing, Joseph H.....Ann Arbor
Farrior, J. Brown .....Ann Arbor
Farris, Jack .....Ann Arbor
Field, Henry, Jr.....Ann Arbor
Folsome, Clair Edwin .....
.....Tenafly, New Jersey
Forsythe, Warren E.....Ann Arbor
Fralick, F. Bruce.....Ann Arbor
Freyberg, Richard H.....Ann Arbor
Frye, Carl H. .....Ann Arbor
Furstenberg, Albert C.....Ann Arbor
Ganzhorn, Edwin.....Ann Arbor
Gardiner, Sprague.....Baltimore, Md.
Gates, John L.....Ann Arbor
Gates, Neil A.....Ann Arbor
Gehring, Harold W. .....Ann Arbor
German, Jas. W. .....Ypsilanti
Gordon, William G. .....Ann Arbor
Green, Mervin E. .....Ann Arbor
Gulde, Andros.....Chelsea
Hagerman, George W.....Ann Arbor
Haight, Cameron .....Ann Arbor
Hammond, W. W.....Plymouth

Parker, W. T. .....Owosso
Pochert, R. C.....Owosso
Richards, C. J.....Durand
Shepherd, W. F.....Owosso
Slagh, E. M.....Elsie
Soule, Glenn T.....Henderson
Watts, Fred A.....Owosso
Weinkauf, W. F.....Corunna
Wilcox, Anna L.....Owosso
Wilcox, C. M.....Owosso

Pollock, Donald A.....Yale
Reynolds, Annie E.....Port Huron
Ryerson, W. W.....Port Huron
Searles, Karl F. .....Capac
Schaefer, W. A.....Port Huron
Sites, E. C.....Port Huron
Smith, George Reginald..Port Huron
Thomas, C. F.....Port Huron
Treadgold, Douglas.....Port Huron
Vroman, M. E.....Port Huron
Waltz, J. F.....Capac
Ware, John R.....Port Huron
Wass, Henry C.....St. Clair
Waters, George.....Port Huron
Wellman, Joseph E.....Port Huron
Wight, William G.....Yale
Witter, Gordon L.....Port Huron
Zemmer, A. L.....Port Huron

Rice, John W.....Sturgis
Sheldon, J. P.....Sturgis
Slote, L. K.....Constantine
Springer, R. A.....Centerville
Sweetland, G. J.....Constantine
Zimont, R. D.....Constantine

Petrie, William.....Caro
Rundell, Annie Stevens.....Vassar
Ruskin, D. B. .....Caro
Savage, Lloyd L.....Caro
Spohn, U. G.....Fairgrove
Starmann, Bernard.....Cass City
Swanson, E. C.....Vassar
*Vail, Harry F. .....
.....Alexandria, Louisiana
Von Renner, Otto.....Vassar

Sayre, Phillip P.....South Haven
Spalding, R. W.....Gobles
Steele, Arthur H.....Paw Paw
TenHouten, Charles.....Paw Paw
*Terwilliger, Edwin .....
.....San Antonio, Texas
Williams, F. N.....Hartford
Young, William R.....Lawton

Hannum, M. R.....Milan
Harris, Bradley M.....Ypsilanti
Haynes, Harley A.....Ann Arbor
Helper, Morton.....Ann Arbor
Healey, Claire E.....Ann Arbor
Henry, L. Dell.....Ann Arbor
Himler, Leonard E.....Ann Arbor
Hodges, Fred J.....Ann Arbor
Howard, S. C.....Ann Arbor
Howes, Homer A. .....Ann Arbor
Jackson, Howard C.....Ann Arbor
Jimenez, Buenaventura.....Ann Arbor
Johnson, Lester J.....Ann Arbor
Johnson, Vincent C.....Ann Arbor
Johnston, Franklin D. ....Ann Arbor
Jordan, Paul H.....Ann Arbor
Kahn, Edgar A.....Ann Arbor
Keller, Arthur P. .....Ann Arbor
Kemper, J. W.....Ann Arbor
Kleinschmidt, Earl E.....Chicago, Ill.
Kleinschmidt, Gladys.....Chicago, Ill.
Klingman, Theophil.....Ann Arbor
Knoll, Leo.....Ann Arbor
Kretzschmar, Norman R. Ann Arbor
La Fever, Sidney L.....Ann Arbor
Lamberson, Frank A. .....Detroit
Lampe, Isadore .....Ann Arbor
Law, John L.....Ann Arbor
Lichty, Dorman E.....Ann Arbor
List, Carl F.....Ann Arbor
Lowell, Vivion E. .....Ypsilanti
Lynn, Harold P. .....Ypsilanti
Maddock, Walter G.....Ann Arbor

Malcolm, Karl D.....Ann Arbor
Marshall, Mark.....Ann Arbor
Martin, Donald W.....Ypsilanti
Maxwell, James H.....Ann Arbor
McCotter, Rollo E. .....Ann Arbor
McEachern, Thomas H.....Ann Arbor
McKhann, Chas F. .....Ann Arbor
Metzger, Ida.....Ypsilanti
Miller, Harold .....Saline
Miller, Norman F.....Ann Arbor
Moore, Donald F. .....Ypsilanti
Muehlig, Geo. F. .....Ann Arbor
Myers, Dean W.....Ann Arbor
Nesbit, Reed M.....Ann Arbor
Newburgh, L. H.....Ann Arbor
Oliphant, L. W.....Ann Arbor
Palmer, Alger A.....Chelsea
Patterson, Ralph M.....Ann Arbor
Peet, Max.....Ann Arbor
Peterson, Reuben .....Duxbury, Mass.
Pillsbury, Charles B.....Ypsilanti
Pollard, H. M.....Ann Arbor
*Power, Frank H....Ft. Jackson, S. C.
Price, Helen F. .....Ann Arbor
Prout, Gordon J.....Saline
*Ragué, Paul O.....Fort Custer
Ransom, Henry.....Ann Arbor
Raphael, Theophile.....Ann Arbor
Ratliff, Rigdon K.....Ann Arbor
Reynolds, Stephen .....Ann Arbor
Riecker, Herman H. .....Ann Arbor
Riggs, Harold W. .....Ann Arbor
Robb, David N. .....Ypsilanti
Ross, C. Howard.....Ann Arbor
Sacks, Wilma.....Ann Arbor
Sames, Albert A. .....Ann Arbor
Schumacker, W. E.....Ann Arbor
Seime, Reuben I. .....Whitmore Lake
Sheldon, John M.....Ann Arbor
Sibbald, Malcolm L. .....Chelsea
Sink, Emory W.....Ann Arbor
Slasor, Wm. J. .....Ann Arbor
Smalley, Marianna.....Ann Arbor
Smith, Kenneth M. .....Ann Arbor
Smyth, Charley J. .....Ann Arbor
Snow, Glenadine.....Ypsilanti
Solis, Jeanne C.....Ann Arbor
Soller, M. E.....Ypsilanti
Steiner, L. G.....Ann Arbor
Sundwall, John.....Ann Arbor
Teed, Reed Wallace.....Ann Arbor
Thieme, E. Thurston.....Ann Arbor
Towsley, Harry A.....Ann Arbor
Vander Slice, David.....Ann Arbor
Van Zwaluwenburg, Benj. .Ann Arbor
Waggoner, R. W.....Ann Arbor
Waldron, Alexander M.....Ann Arbor
Wallace, J. B. .....Saline
Wanstrom, Ruth C.....Ann Arbor
Washburne, Charles L.....Ann Arbor
Weller, Carl V. .....Ann Arbor
Wessinger, J. A.....Ann Arbor
Wile, Udo J.....Ann Arbor
Williamson, F. B.....Ypsilanti
Wilson, Frank N. .....Ann Arbor
Wisdom, Inez.....Ann Arbor
Woods, J. J.....Ypsilanti
Work, Walter P.....Ann Arbor
Worth, Melissa H.....Ypsilanti
Wright, Walter J.....Ypsilanti
Wylie, William C.....Dexter
Yoder, O. R.....Ypsilanti

## Wayne County

Aaron, Charles D.....Detroit
Abrams, Harry M.....Detroit
Abramson, Max .....Detroit
Adams, James Robert.....Dearborn
Adelson, Sidney L.....Detroit
Adler, Leopold.....Detroit
Adler, Sidney.....Detroit
Agins, Jacob.....Detroit
Agnelly, Edward J.....Detroit
Agnew, George H.....Detroit
Albrecht, Herman F.....Detroit
Aldrich, Napier S.....Detroit
Alford, E. S.....Belleville
Allen, Norman M.....Detroit
Alles, Russell W.....Detroit
Allison, Frank B.....Detroit
Allison, Herbert C.....Detroit
Altman, Raphael.....Detroit
Altshuler, Ira M.....Detroit
Altshuler, Samuel S.....Detroit
Amberg, Emil.....Detroit
Ames, C. C.....Detroit
Amolsch, Arthur L.....Detroit
Amos, Thomas G.....Detroit
Anderson, Bruce.....Detroit
Anderson, Gordon H.....Detroit
Anderson, J. O.....Detroit
Anderson, Walter L.....Detroit
Anderson, Walter T.....Detroit
Andries, Joseph H.....Detroit
Andries, Raymond C.....Detroit
Ankley, J. W.....Detroit
Anslow, Robert E.....Detroit
Appel, Phillip R.....Detroit
*Appelman, H. B.....Fort Custer
Arehart, Burke W.....Detroit
Armstrong, Arthur G.....Detroit
Armstrong, Oscar S.....Detroit
Arnold, Effie.....Detroit
Aronstam, Noah E.....Detroit
Ascher, Meyer S.....Detroit
Ashe, Stilson R.....Detroit
Ashley, L. Byron.....Detroit
Ashton, F. B.....Highland Park
Asselin, J. L. .....Detroit
Asselin, Regis F.....Detroit
Atchison, Russell M.....Northville
Athay, Roland M.....Detroit
Atler, Lawrence R.....Detroit
August, Harry E.....Detroit
Babcock, Kenneth B.....Detroit
Babcock, Myra E.....Detroit
Babcock, W. L.....Detroit
Babcock, W. W.....Detroit
Bach, Walter F.....Detroit
Bachman, Morris E.....Detroit
Bacon, Vinton A.....Detroit
Baeff, Michael A.....Detroit
Baer, Raymond B.....Detroit
Bagley, Harry E.....Dearborn
Bailey, Carl C.....Detroit
Bailey, Don A.....Detroit
Bailey, Louis J.....Detroit
Baker, Clarence.....Detroit
Bakst, Joseph.....Detroit
Balcerski, Matthew A.....Detroit
Ballard, Charles S.....Detroit
Balser, Charles W.....Detroit
Baltz, James I.....Detroit
Barker, F. Marion.....Grosse Point
Barnett, Saul E.....Detroit
Barrett, Wyman D.....Detroit
Bartemier, Leo H.....Detroit
Barton, J. R.....Detroit
Bauer, A. Robert.....Detroit
Bauer, Benedict J.....Detroit
Bauer, Lester Eugene.....Detroit
Baumer, Moe.....Detroit
Baumgarten, Elden C.....Detroit
Beach, Watson.....Detroit
Beam, A. Duane.....Detroit
Beaton, Colin.....Detroit
Beattie, Robert.....Detroit
Beatty, S. M.....Detroit
Beaver, Donald C.....Detroit
Beck, Eva F.....Eloise
Becker, Abraham.....Detroit
Becker, Joseph William.....Detroit
Becklein, C. L.....Detroit
Beckwitt, M. C.....Eloise
Bedell, A.....Detroit
Beer, Jos.....Detroit
Beeuwkes, L. E.....Dearborn
Begle, Howell L.....Detroit
Behn, Claud W.....Detroit
Beigler, Sydney K.....Detroit
Beitman, Max R.....Detroit
Belanger, Ernest E.....River Rouge
Belanger, Henry .....Detroit
Belknap, Warren F.....Detroit
Bell, J. Kenner.....Detroit
Bell, William M.....Detroit
Bennett, Germany E.....Detroit
Bennett, Harry B.....Detroit
Bennett, Zina B.....Detroit
Benson, C. D.....Detroit
Benson, Davis A.....Detroit
Bentley, Neil I.....Detroit
Beresh, Louis.....Detroit
Berge, Clarence A.....Detroit
Berke, Sydney S.....Detroit
Berkowitz, William E.....Detroit
Berman, Harry S.....Detroit
Berman, Lawrence .....Detroit
Berman, Robert.....Detroit
Berman, Sidney.....Detroit
Berman, Sidney .....Detroit
Bernard, Walter G.....Detroit
Bernbaum, Bernard.....Detroit
Bernstein, Albert E.....Detroit
Bernstein, Samuel S.....Detroit
Berry, Joseph E.....Detroit
Besancon, J. H.....Detroit
Best, T. H. Edward.....Detroit
Bicknell, Frank B.....Detroit
Biddle, Andrew P.....Detroit
Birch, John R.....Detroit
Birkelo, Carl C.....Detroit
Bittker, I. Irving.....Detroit
Black, Perry S.....Detroit
Blaess, Marvin J.....Detroit
Blain, Alex W., Jr.....Detroit
Blain, Jas. H., Jr.....Detroit
Blair, K. E.....Detroit
Blanchard, Fred N.....Detroit
Blashill, James B.....Detroit
Bleier, Alfred .....Detroit
Bleier, Joseph.....Detroit
Bloch, Abraham.....Detroit
Blodgett, William E.....Detroit
Blodgett, Wm. H.....Detroit
Bloom, Arthur R.....Detroit
Bloomer, Earl .....Dearborn
Blumenthal, Franz L.....Detroit
Boccaccio, John .....Detroit
Boccia, James J.....Detroit
Boddie, Arthur W.....Detroit
Boehm, John D.....Detroit
Boell, Arthur F.....Detroit
Bogusz, Ladislaus .....Detroit
Bohn, Stephen.....Detroit
Boileau, Thornton I.....Detroit
Boland, J. Rolland.....Detroit
Boles, A. E.....Detroit
Bovill, Edwin G.....Detroit
Bowers, Leo J.....Detroit
Bowman, Frank E.....Detroit
Boyd, John H.....Detroit
Bracken, Andrew H.....Dearborn
Bradshaw, William H.....Detroit
Braitman, Louis .....Detroit
Braley, Alson E.....Detroit
Braley, William N.....Detroit
*Brancheau, L. T.
Camp Beauregard, La.
Brand, Benjamin.....Detroit
Brando, Russell G.....Detroit
Brandt, Edward L.....Detroit
Braun, Lionel.....Detroit
Breitenbecher, Edward R.....Detroit
Brengle, Deane R.....Detroit
Breon, Guy L.....Detroit
Briegel, Walter A.....Detroit
Brines, O. A.....Detroit
Bringard, Elmer L.....Detroit
Brisbois, Harold J.....Plymouth
Brodersen, Harvey S.....River Rouge
Bromme, William.....Detroit
Brooks, A. L.....Detroit
Brooks, Clark D.....Detroit
Brooks, Charles W.....Detroit
Brosius, William L.....Detroit
Brough, Glen A.....Detroit
Brown, A. O.....Detroit
Brown, Carlton F.....Detroit
Brown, Harvey F.....Detroit
Brown, Henry S.....Detroit
Brown, John R.....Detroit
Brown, Stanley H.....Detroit
Brown, Thomas A.....Detroit
Brownell, Paul G.....Detroit
Brunk, Andrew S.....Detroit
Brunk, C. F.....Detroit
Brunke, Bruno B.....Detroit
Bryce, John D.....Detroit
Buchanan, W. Paul.....Detroit
Buchner, Harold W.....Detroit
Budson, Daniel .....Detroit
Buell, Charles E., Jr.....Detroit
Buesser, Frederick G.....Detroit
Buller, H. L.....Detroit
Bullock, Earl S.....Detroit
Burgess, Charles M.....Detroit
Burgess, Jay M.....Detroit
Burns, Robert T.....Detroit
Burnstine, Julius Y.....Detroit
Burnstine, Perry P.....Detroit
Burr, George C.....Detroit
Burr, H. Leonard .....Detroit
Burton, D. T.....Detroit
*Bush, Glendon J.....Rantoul, Ill.
Bush, Lowell M.....Detroit
Buss, John A.....Detroit
Butler, Harry J.....Detroit
Butler, L. H.....Detroit
Butler, Volney N.....Detroit
Butterworth, Herman K...Lincoln Park
Buttram, Edward J.....Detroit
Byers, Dudley W.....Detroit
Byington, Garner M.....Detroit
Cadieux, Henry W.....Detroit
Caldwell, J. Ewart.....Detroit
Calkins, H. N.....Detroit
Callaghan, T. T.....Detroit
Campau, George H.....Detroit
Campbell, Don M.....Detroit
Campbell, Duncan.....Detroit
Campbell, Duncan A.....Detroit

Campbell, John A.....Detroit
Campbell, Malcolm D.....Detroit
Campbell, Mary B.....Detroit
Candler, Clarence L.....Detroit
Canter, Allie E.....Detroit
Canter, Gayle E.....Detroit
Caplan, Leslie.....Detroit
Caraway, James E.....Wayne
Carey, Benjamin W.....Detroit
Carey, Cornelius.....Detroit
Carleton, L. H.....Detroit
Carmichael, E. K.....Detroit
Carnes, Harry.....Detroit
Carp, Joseph.....Detroit
Carpenter, C. H.....Detroit
Carpenter, C. J.....Detroit
Carr, J. G.....Detroit
Carroll, Lona B.....Detroit
Carson, Herman J.....Detroit
Carstens, Henry R.....Detroit
Carter, John M.....Detroit
Carter L. F.....Detroit
Cassidy, William J.....Detroit
Castrop, C. W.....Dearborn
Cathcart, Edward.....Detroit
Catherwood, Albert E.....Detroit
Caughey, Edgar H.....Detroit
*Cavell, Roscoe .....Eloise
Cetlinski, C. A.....Hamtramck
Chalat, Jacob H.....Detroit
Chall, Henry G.....Detroit
Chance, J. H.....Detroit
Chapman, Aaron L.....Detroit
Chapman, Everett L.....Detroit
Chapnick, H. A.....Detroit
Chase, Clyde H.....Detroit
Chatel, Arthur N.....Detroit
Chene, George C.....Detroit
Chenik, Ferdinand .....Detroit
Chester, W. P.....Detroit
Chesluk, H. M.....Detroit
Chipman, W. A.....Detroit
Chittenden, George E.....Detroit
Chittick, William R...San Diego, Calif.
Chostner, G. C.....Detroit
Christensen, C. A.....Dearborn
Christopoulos, D. G.....Detroit
Chrouch, Laurence A.....Detroit
Ciprian, Joseph E.....Detroit
Clark, Benjamin W.....Detroit
Clark, C. M.....Detroit
Clark, Donald V.....Detroit
Clark, George E.....Detroit
Clark, Harold E.....Detroit
Clark, Harry G.....Detroit
Clark, Harry L.....Detroit
Clark, Raymond L.....Detroit
Clarke, Emilie Arnold.....Detroit
Clarke, George L.....Detroit
*Clarke, Niles A.
Camp Beauregard, La.
Clarke, Norman E.....Detroit
Cleage, Louis J. .....Detroit
Clifford, Charles H.....Detroit
Clifford, John E.....Detroit
Clippert, J. C.....Grosse Ile
Coan, Glenn L.....Wyandotte
Coates, Carl Amos.....Dearborn
Cobane, John H.....Detroit
Cochrane, Edgar G.....Detroit
Cohn, Daniel E.....Detroit
Cohoe, Don A.....Detroit
Cole, Fred H.....Detroit
Cole, James E.....Detroit
Cole, Wyman C. C. .....Detroit
Coleman, Margarete W.....Detroit
Coleman, Wm. G.....Detroit
Coll, Howard R.....Detroit
Collins, Edmund F.....Detroit
Colyer, Raymond G.....Detroit
Connelly, Basil L.....Detroit
Connelly, Richard C.....Detroit
Connolly, Frank.....Detroit
Connolly, John P.....Detroit
Connor, Guy L.....Detroit
Connors, J. J.....Detroit
Conrad, E. R.....Detroit
Cooksey, Warren B.....Detroit
Cooley, Thomas B.....Detroit
Coolidge, Maria Belle..Grosse Pt. Park
Cooper, E. L.....Detroit
Cooper, James B.....Detroit
Corbeille, Catherine.....Detroit
Corbett, John J. .....Detroit
Coseglia, Robert P.....Detroit
Costello, Russell T.....Detroit
Cothran, Robert M.....Detroit
Cotruro, L. D.....Detroit
Cotton, S. O.....Detroit
Coucke, Henry O.....Detroit
Coulter, William J.....Detroit
Cowan, Wilfred.....Detroit
Cowen, Leon B.....Detroit
Cowen, Robert L.....Detroit
Coyne, Douglas Ruthven.....Detroit
Craig, Henry R.....Eloise
Crawford, Albert S.....Detroit
Cree, Walter J.....Detroit
Crews, Thomas H.....Detroit
Croll, L. J.....Detroit
Cross, Harold E.....Detroit
Crossen, Henry F.....Detroit
Croushore, J. E.....Detroit
Cruikshank, Alexander.....Detroit
Curry, F. S.....Detroit
Curtis, Frank E.....Detroit
Cushing, Russell G.....Detroit
Cushman, H. P.....Detroit

*Dana, Harold M.....Fort Custer
Danforth, J. C.....Detroit
Danforth, Mortimer E.....Detroit
*Daniels, L. E.....Fort Custer
Darling, Milton A.....Detroit
Darpin, Peter H.....Detroit
Davidow, David M.....Detroit
Davidson, Harry O.....Detroit
Davies, Thomas S.....Detroit
Davies, Windsor S.....Detroit
Davis, Egbert F.....Detroit
Davis, James E.....Detroit
*Davis, Lindon Lee.....Fort Custer
Dawson, F. E.....Detroit
Dawson, W. A.....Detroit
Defever, Cyril R.....Detroit
Defnet, William A.....Detroit
*DeGroat, Albert .....Fort Custer
DeHoratiis, Joseph.....Detroit
Demaray, John F.....Detroit
Dempster, James H.....Detroit
DeNike, A. James.....Detroit
Denis, George M.....Detroit
Denison, Louis L.....Detroit
Derby, Arthur P.....Detroit
Derleth, Paul E.....Detroit
DeTomasi, Rome .....Detroit
Dibble, Harry F.....Detroit
Dickman, Harry M.....Detroit
Dickson, B. R.....Detroit
Diebel, Nelson W.....Detroit
Diebel, William H.....Detroit
Dietzel, H. O.....Detroit
Dill, Hugh L.....Detroit
Dill, J. Lewis.....Detroit
*DiLoreto, Panfilo Camillo..Carlisle, Pa.
Dittmer, Edwin.....Detroit
Dixon, Fred W.....Detroit
Dixon, Ray S.....Detroit
Dodds, John C.....Detroit
Dodenhoff, C. F.....Detroit
Doerr, Louis E.....Detroit
Domzalski, C. A.....Detroit
Donald, Douglas .....Detroit
Donald, William M.....Detroit
Donovan, John D.....Detroit
Dorsey, John M.....Detroit
Doty, Chester A.....Detroit
Doub, Howard P.....Detroit
Douglas, Bruce H.....Detroit
Douglas, Clair L.....Detroit
Dovitz, Benjamin W.....Detroit
Dow, Roy E.....Detroit
Dowdle, Edward.....Detroit
Dowling, Harvey E.....Detroit
Dowling, Pearl Christie.....Detroit
Downer, Ira G.....Detroit
Doyle, George H.....Detroit
Drake, James J.....Detroit
Drews, Robert S.....Detroit
Drolshagen, E. A.....Detroit
Droock, Victor.....Detroit
Droste, Arnold T.....Dearborn
Drummond, Donald L.....Detroit
Dubin, Joseph J.....Dearborn
Dubnove, Aaron.....Detroit
DuBois, Paul W.....Detroit
Dubpernell, Karl.....Detroit
Dubpernell, Martin S.....Detroit
Ducey, Edward F.....Detroit
Duffy, Edward A.....Detroit
Dundas, E. M.....Detroit
Dunlap, Henry A.....Detroit
Dunn, Cornelius E.....Detroit
Durocher, Edmund J.....Ecorse
Durocher, Normand E.....Detroit
Dutchess, Charles E.....Detroit
Dwaihy, Paul.....Detroit
Dwyer, F. J.....Wyandotte
Dwyer, Francis.....Detroit
Dysarz, T. T.....Detroit
Dziuba, John F.....Detroit

Eades, Charles C.....Detroit
Eakins, Frederick J.....Dearborn
Eder, Joseph R.....Detroit
Eder, Samuel J.....Detroit
Edgar, Russell G.....Detroit
Edwards, J. W.....Detroit
Eisman, Clarence H.....Detroit
Elliott, William G.....Detroit
Ellis, Seth W.....Detroit
Elvidge, Robert J.....Detroit
Emmert, Herman C.....Detroit
Engel, Earl H.....Wyandotte
Engel, John B.....Detroit
Ensign, Dwight C.....Detroit
Ensing, Osborn.....Detroit
Epstein, S. G.....Detroit
Erickson, Milton H.....Eloise
Erkfitz, Arthur W.....Detroit
Erman, Joseph M.....Detroit
Eschbach, Joseph W.....Dearborn
Estabrook, Bert U.....Detroit
Ettinger, Clayton J.....Detroit
Evans, Leland S.....Detroit
Evans, William A., Jr.....Detroit

Falick, Mordecai Louis.....Detroit
Falk, Ira E.....Detroit
Fandrich, Theodore.....Detroit
Farbman, Aaron A.....Detroit
Fauman, David H.....Detroit
Faunce, Sherman P.....Detroit
Fay, George E.....Detroit
Felcyn, W. George.....Detroit
Feldstein, Martin Z.....Detroit
Fellman, Abraham R.....Detroit
Fenton, E. H.....Detroit
Fenton, Meryl M.....Detroit
Fenton, Russell F.....Detroit
Fenton, Stanley C.....Detroit
Ferrera, Louis V.....Detroit
Fettig, Carl A.....Detroit
Fine, Edward.....Detroit
Fischer, Frederick J.....Detroit
Fisher, O. O.....Detroit
Fisher, R. L.....Detroit
Fitzgerald, E. W.....Detroit
Fitzgerald, James M.....Detroit
Flaherty, H. J.....Detroit
Flaherty, N. W.....Detroit
Flaherty, S. A.....Detroit
Fleming, L. N.....Detroit
Flora, William R.....Detroit
Flower, J. A.....Detroit
Foley, Hugh S.....Dearborn
Font, Anthony J.....Detroit
Foote, James A.....Lincoln Park
Ford, F. A.....Detroit
Ford, George A.....Detroit
Ford, Sylvester.....Detroit
Ford, Walter D.....Detroit
Forrester, Alex V.....Detroit
Forsythe, John R.....Detroit
Foster, E. Bruce.....Detroit
Foster, Linus J.....Detroit
Foster, Owen C.....Detroit
Foster, William L.....Detroit
Foster, W. M.....Detroit
Francis, Donald .....Detroit
Fraser, Harvey E.....Detroit
Fraser, H. F.....Detroit
Frazer, Mary Margaret.....Detroit
Freedman, John .....Detroit
Freedman, Milton .....Detroit
Freeman, D. K.....Detroit
Freeman, Mabel .....Detroit
Freeman, Thelma .....Detroit
Freeman, Wilmer .....Detroit
Freese, John A.....Detroit
Fremont, Joseph C.....Detroit
Freund, Hugo A.....Detroit
*Friedlaender, Alex S.....Fort Custer
Frostic, Wm. D.....Detroit
Frothingham, George E.....Detroit
Fulgenzi, Andrew A.....Detroit
Fuller, Hugh M.....Grosse Pointe
Furey, Edward T.....Detroit

Gaba, Howard .....Detroit
Gabe, Sigmund .....Detroit
Gaberman, David B.....Detroit
Galantowicz, H. C.....Detroit
Galdonyi, Laslo L.....Detroit
Galerneau, D. B.....Van Dyke
Galvin, Paul P. .....Detroit
Gamble, Parker B.....Detroit
Gariepy, L. J.....Detroit
Gaston, Herbert B.....Detroit
Gehrke, August E.....Detroit
Geib, Ledru O.....Detroit
Geiter, Clyde W.....Detroit
Geitz, William A.....Detroit
Gellert, I. S.....Detroit
George, A. W.....Detroit
Gerondale, Elmond J.....Detroit
Gibson, James C.....Detroit
Giese, Fred W.....Detroit
Gigante, Nicola .....Detroit
Gignac, Arthur L.....Detroit
Gillespie, Stephen M.....Dearborn

Gillman, R. W.....Detroit
Gingrich, Wayne A.....Detroit
Ginsberg, Harold I.....Detroit
Gitlin, Charles .....Detroit
Gittins, Perry C.....Detroit
Glasgow, Gordon K.....Detroit
Glassman, Samuel .....Detroit
Glazer, Walter S.....Detroit
Glees, J. L.....Detroit
Glick, M. J.....Detroit
*Glickman, L. Grant
Minneapolis, Minn.
Glowacki, B. F.....Detroit
Gmeiner, Clarence C.....Detroit
Goerke, Elmer A.....Detroit
Goetz, Angus G.....Detroit
Goldberg, Arthur .....Detroit
Goldberg, Nathan H.....Detroit
*Goldin, M. I.....Fort Custer
Goldman, Perry .....Detroit
Goldsmith, Joseph D.....Detroit
Goldstone, R. R.....Detroit
Gollman, Maurice D.....Detroit
Gonne, William S.....Detroit
Goodrich, B. E.....Detroit
Gordon, John W.....Detroit
Gordon, William H.....Detroit
*Gorelick, Harry S...Camp Grant, Ill.
Gorning, Raymond P.....Detroit
Gottschalk, Fred W.....Detroit
Gould, S. Emanuel.....Eloise
Goux, R. S.....Detroit
Grace, Joseph M.....Eloise
Graff, J. M.....Detroit
Gratton, Henri L.....Detroit
Grain, Gerald O.....Detroit
Grajewski, Leo E.....Detroit
Granger, Francis L.....Detroit
Grant, Heman E.....Detroit
*Gray, Arthur S.....Kalamazoo
Green, Lewis .....Detroit
Green, Louis M.....Detroit
*Green, Sydney H.....San Francisco
Greenberg, Julius J.....Detroit
*Greenberg, Morris Z.....Fort Custer
Greene, John B.....Detroit
Greenidge, Robert .....Detroit
Greenlee, William Tate.....Detroit
Greiner, Bert A.....Detroit
Grekin, Joseph .....Detroit
Grekin, Samuel L.....Detroit
Grimaldi, G. J.....Detroit
Grob, Otto .....Detroit
Gronow, A. A.....Detroit
Gruber, T. K.....Eloise
Guerrero, Jose .....Detroit
Guimaraes, A. S.....Dearborn
Gurdjian, E. S.....Detroit
*Gutow, Benj. R..Fort McClellan, Ala.

Hale, Arthur S.....Detroit
Hall, Arche C.....Detroit
Hall, E. Walter.....Detroit
Hall, James A. J.....Detroit
Hall, Ralph E.....Detroit
Hall, Robert J.....Detroit
Haluska, Joseph A.....Detroit
H'Amada, Norman K.....Detroit
Hamburger, A. C.....Detroit
Hamil, Brenton M.....Detroit
Hamilton, Norman C.....Detroit
Hamilton, Stewart .....Detroit
Hamilton, William .....Detroit
Hamilton, William F.....Detroit
Hammer, Charles A.....Detroit
Hammer, Edwin J.....Detroit
Hammond, A. E.....Detroit
Hammond, James L.....Inkster
Hand, Fordus V.....Detroit
Hanna, E. Howard.....Detroit
Hanna, Samuel C.....Detroit
Hansen, Frederick E.....Detroit
Hanson, Joseph .....Detroit
Hardstaff, R. John.....Detroit
Hardy, George C.....Detroit
Harkins, Henry N.....Detroit
Harley, Louis M.....Detroit
Harm, W. B.....Detroit
*Harper, Jesse T.....Fort Custer
Harrell, Voss .....Detroit
Harris, Harold H.....Detroit
Harrison, Henry .....Detroit
Harrison, Hugh .....Detroit
Harrison, Wesley .....Detroit
Hart, J. Clarence .....Detroit
Hartgraves, Hallie .....Detroit
Hartman, W. B.....Detroit
Hartzell, John B.....Detroit
Hasley, Clyde K.....Detroit
Hasley, Daniel E.....Detroit
Hasner, R. B.....Detroit
Hastings, Orville J.....Detroit
Hause, Glen E.....Detroit
Hauser, I. Jerome.....Detroit
Hauser, John E.....Detroit
Havers, Howard .....Detroit
Hawken, William C.....Detroit
Hawkins, James W.....Detroit
Hayes, Joseph D.....Detroit
Heath, Leonard P.....Detroit
Heath, Parker .....Detroit
Heavner, L. E.....Detroit
Hedges, Frank W.....Detroit
Hedrick, Donald W.....Detroit
Heenan, T. H.....Detroit
Heideman, Louis .....Detroit
Heldt, Thomas J.....Detroit
Hendelman, Manuel H.....Detroit
*Henderson, A. B..Fort Bragg, N. C.
Henderson, Harold .....Detroit
Henderson, William E.....Detroit
Henderson, Wm. W.....Detroit
Henig, Fred .....Detroit
Herkimer, Dan R.....Lincoln Park
Herrold, Rose E.....Detroit
Herschelmann, Roy F.....Detroit
Hershey, Lynn N.....Detroit
Hewitt, Leland V.....Detroit
Heyner, Stanley A.....Detroit
Higbee, Arthur L.....Detroit
Hildebrant, Hugh R. .....Detroit
Hileman, Lee .....Ecorse
Hillenbrand, A. E.....Detroit
Hillier, L. G.....Detroit
Hipp, William .....Detroit
Hirschman, L. J.....Detroit
Hochman, Morton M.....Detroit
Hodge, James B.....Detroit
Hodges, Roy W.....Detroit
Hodoski, Frank J.....Detroit
Hoffman, E. S.....Detroit
Hoffman, Henry A.....Detroit
Hoffmann, Martin H.....Eloise
Hollander, A. J.....Detroit
Holman, Herbert H.....Detroit
Holmes, Alfred W.....Detroit
*Holt, Henry T.....Fort Custer
Honhart, Fred L.....Detroit
Honor, William H.....Wyandotte
Hoobler, B. Raymond.....Detroit
Hookey, J. A.....Detroit
Hooper, Norman L.....Detroit
Hoopes, Benjamin F.....Detroit
Hoops, George B.....Detroit
Hopkins, J. E.....Detroit
Horan, Thomas .....Detroit
Horny, Hugo .....Detroit
Horton, Reece H.....Detroit
Horvath, Louis O.....Detroit
Horwitz, John B.....Detroit
Host, Lawrence N.....Detroit
Howard, Austin Z.....Detroit
Howard, Philip J.....Detroit
Howell, Bert F.....Detroit
Howell, Robert .....Eloise
Howes, Willard Boyden.....Detroit
Howlett, Howard T.....Detroit
Hromadko, Louis .....Detroit
Hubbard, John P.....Detroit
Hudson, A. Willis.....Detroit
Hudson, J. Stewart....Grosse Pointe
Hudson, William A.....Detroit
Huegli, Wilfred A.....Detroit
Huff, Reginald G.....Wayne
Hughes, Albertie A.....Detroit
Hughes, Ray W.....Detroit
Hull, L. W.....Detroit
Hunt, T. H.....Detroit
Hunter, Basil H.....Detroit
Hunter, Elmer N.....Detroit
Husband, Charles W.....Detroit
Hyatt, Jarvis M.....Detroit
Hyde, F. W.....Detroit

Iacobell, Peter H.....Detroit
Ignatius, A. A.....Detroit
Insley, Stanley W.....Detroit
Irwin, W. A.....Detroit
Isaacs, Joseph C.....Detroit
Israel, Barney B.....Detroit
Israel, J. G. .....Detroit
Ivkovich, Peter .....Detroit

Jacoby, Myron D.....Detroit
Jaeger, Grove A.....Detroit
Jaeger, Julius P.....Detroit
Jaekel, C. N.....Detroit
Jaffar, Donald J.....Detroit
Jaffe, Jacob .....Detroit
Jaffe, J. L.....Detroit
Jaffe, Louis .....Detroit
Jahsman, William E.....Detroit
James, L. Mae.....Detroit
Jamieson, Robert C.....Detroit
Jarre, Hans A.....Detroit
Jarzembowski, F. B.....Detroit
Jarzynka, Frank J.....Detroit
Jasion, Lawrence J.....Detroit
Jend, William J.....Detroit
Jenkins, E. A.....Detroit
Jennings, Alpheus F.....Detroit
Jentgen, Charles J.....Detroit
Jentgen, L. G.....Detroit
Jennings, Robt. M.....Detroit
Jewell, F. C. .....Detroit
Jodar, E. O.....Detroit
John, Hubert R. .....Detroit
Johnson, Homer L.....Detroit
Johnson, Orlen J.....Detroit
Johnson, Ralph A.....Detroit
Johnson, R. M.....Detroit
Johnson, W. H. M.....Detroit
Johnston, Everett V.....Detroit
Johnston, J. A.....Detroit
Johnston, John L.....Detroit
Johnston, William E.....Detroit
Johnstone, B. I.....Detroit
Joinville, E. V.....Detroit
Jones, Adrian R.....Detroit
Jones, Arthur J.....Detroit
Jones, H. C.....Detroit
Jones, L. Faunt.....Detroit
Jones, Roy D.....Detroit
Jonikaitis, Joseph J.....Detroit
Joyce, Stanley J.....Detroit
Judd, C. Hollister.....Detroit
*Juliar, Benjamin .....Fort Custer

Kahn, William W.....Detroit
Kallet, Herbert I.....Detroit
Kallman, David .....Detroit
Kallman, Leo .....Detroit
Kallman, R. Robert .....Detroit
Kaminski, Ladislaus R.....Detroit
Kaminski, Zeno L.....Detroit
Kamperman, George A.....Detroit
Kapetansky, A. J.....Detroit
Kapetansky, Nathan J.....Detroit
Karr, Herbert S.....Detroit
Kasper, Joseph A.....Detroit
Kass, J. B.....Detroit
Katzman, I. S.....Detroit
Kaump, Donald H.....Detroit
Kay, Harry H.....Detroit
Kazdan, Morris A.....Dearborn
Keane, William E.....Detroit
Keemer, Edgar B. .....Detroit
Keemer, T. Beatrice .....Detroit
Keene, Clifford H. .....Wyandotte
Kehoe, Henry J.....East Detroit
Kelly, Edward W.....Detroit
Kelly, Frank A.....Detroit
Kemler, Walter J.....Ecorse
Kennary, James M.....Detroit
Kennedy, Charles S.....Detroit
Kennedy, Lester F.....Detroit
Kennedy, Robert B.....Detroit
Kenning, John C. .....Detroit
Kenyon, Fanny H.....Detroit
Kern, W. H.....Garden City
Kernick, M. O.....Detroit
Kernkamp, Ralph .....Eloise
Kersten, Armand G.....Detroit
Kersten, Werner .....Detroit
Keshishian, Sarkis K.....Detroit
Kibzey, Ambrose T.....Detroit
Kidner, Frederick C.....Detroit
Kimbell, David C.....Detroit
Kimberlin, Kenneth K.....Detroit
King, Edward D.....Detroit
King, Melbourne J.....Detroit
Kingswood, Roy C.....Detroit
Kirchner, Augustus .....Detroit
Kirker, J. G.....Detroit
Kirschbaum, Harry M.....Detroit
Klebba, Paul .....Detroit
Klein, Louis.....Nutley, New Jersey
Klein, William .....Detroit
Kliger, David .....Detroit
Kline, Starr L.....Detroit
Kloeppel, C. S.....Detroit
Klosowski, Joseph .....Detroit
Klote, M. D.....Detroit
Knaggs, Charles W.....Grosse Pointe
Knaggs, Earl J.....Wyandotte
Knapp, Byron S.....River Rouge
Knapp, Floyd .....Detroit
Knobloch, Edmund J. .....Detroit
Knox, Ross M.....Ecorse
Koch, John C.....Detroit
Koebel, R. H.....Detroit
Koerber, Edw. J.....Detroit
Koessler, George L.....Detroit
Kohn, A. Max.....Detroit
Kohn, M. E.....Detroit
Kokowicz, Raymond J.....Detroit
Kolasa, W. B.....Detroit
Kopel, Joseph O.....Detroit
Korby, George J.....Detroit
Koss, Frank R.....Dearborn
Kossayda, Adam W.....Detroit
*Kovach, Emery..Fort Jackson. S. C.
Kowalski, Valentine L.....Detroit

Kozlinski, Anthony E.....Detroit
Kraus, John J.....Detroit
Kreinbring, Geo. E.....Detroit
Kretzschmar, Clarence A.....Detroit
Krieg, Earl G.....Detroit
Krieger, Harley L.....Detroit
Kritchman, M. J.....Detroit
Kroha, Lawrence .....Detroit
Krohn, Albert H.....Detroit
Kubanek, Joseph L.....Eloise
Kucmierz, Francis S.....Detroit
Kulaski, Chester H.....Detroit
Kullman, Harold J.....Detroit
Kurcz, J. A.....Detroit
Kurtz, I. J.....Detroit
Kwasiborski, S. A.....Wyandotte

Laberge, James M.....Wyandotte
La Bine, Alfred C.....Detroit
LaCore, Ivan .....Detroit
La Ferte, Alfred D.....Detroit
Lakoff, Charles .....Detroit
Lam, Conrad R.....Detroit
*Lammy, James V.
Camp Beauregard, La.
La Marche, N. O.....Detroit
Landers, M. B.....Detroit
Landers, Maurice B., Jr.....Detroit
Lang, Leonard W.....Detroit
Lange, Anthony H.....Detroit
Lange, William A.....Detroit
Laning, George M.....Detroit
Lapham, Fred E.....Detroit
Larson, John A.....Detroit
Larsson, Bror H.....Detroit
Lasley, James Wm.....Detroit
Lassaline, S. J.....Detroit
Latham, Ruth M.....Detroit
Lathrop, Philip L.....Detroit
Laub, Stanley V.....Detroit
Lauppe, Edw. H.....Detroit
Lauppe, F. A.....Detroit
Law, John H.....Detroit
Leach, David .....Detroit
Leacock, Robert C.....Detroit
Leader, L. R.....Detroit
Leaver, L. Ross.....Detroit
Leckie, George C.....Detroit
Ledwidge, Patrick L.....Detroit
Lee, Harry E.....Detroit
LeGallee, Geo. M.....Detroit
Leibinger, Henry R.....Detroit
Leiser, Rudolf .....Eloise
Leithauser, D. J.....Detroit
Leland, Sol .....Detroit
Lemley, Clark .....Detroit
Lemmon, Charles E.....Detroit
Lemmon, Clarence W.....River Rouge
Lentine, James J.....Detroit
Lenz, Willard R.....Detroit
Lepard, C. W.....Detroit
Lepley, Fred O.....Detroit
Lerman, S. E.....Detroit
Lescohier, Alex W.....Grosse Pointe
L'Esperance, Simon P.....Detroit
Leszynski, J. S.....Detroit
Leucutia, Traian .....Detroit
Levant, Arthur B.....Detroit
Levin, David M.....Detroit
Levin, Samuel J.....Detroit
Levine, Sidney S.....Detroit
Levitt, Nathan .....Detroit
Levy, David J.....Detroit
Levy, Marvin B.....Detroit
Lewis, Charles T.....Detroit
Lewis, L. A.....Detroit
Lewis, J. Hugh.....Wyandotte
Lewis, Wilfred John.....Detroit
Libbrecht, Robert V.....Lincoln Park
Lieberman, B. L.....Detroit
Liddicoat, A. G.....Detroit
Lightbody, James J.....Detroit
Lignell, Rudolph .....Detroit
Lilly, Charles J.....Detroit
Lilly, Vernon .....Detroit
Linton, James R.....Eloise
Lipkin, Ezra .....Detroit
Lipschutz, Louis S.....Eloise
Livingston, George D.....Detroit
Livingston, George M.....Detroit
Lockwood, Bruce C.....Detroit
Lofstrom, James E.....Detroit
Long, Earle C.....Detroit
Long, John J.....Detroit
Loranger, C. B.....Detroit
*Loranger, Guy L.....Rantoul, Ill.
Lorber, Joseph .....Detroit
*Lord, Herman M.....Denver, Colo.
Lorentzen, Edwin H.....Detroit
Lovas, W. S.....Detroit
Love, W. Thomas.....Detroit
Lovering, William J.....Detroit
Lowrie, G. B.....Detroit
Lowrie, William L., Jr.....Detroit
Lowry, George L.....Detroit
Luce, Henry A.....Detroit
Lutz, Earl F.....Detroit
Lynn, David H.....Detroit
Lynn, Harvey D.....Detroit
Lyons, Richard H.....Eloise

Mabee, Frank P.....Detroit
Mabley, J. Donald.....Detroit
MacArthur, Robt. .....Detroit
MacCraken, Frances L.....Detroit
MacGregor, W. W.....Detroit
Mack, Harold C.....Detroit
MacKenzie, Earle D.....Detroti
MacKenzie, Frank M.....Detroit
MacKenzie, John W.....Grosse Pointe
Mackersie, W. G.....Detroit
MacMillan, Francis B.....Detroit
MacMullen, Frank B.....Detroit
MacQueen, Malcolm D.....Detroit
Maczewski, John E. .....Detroit
Madsen, Martha .....Detroit
Maguire, Clarence E.....Detroit
Mahlatjie, Nathaniel M.....Detroit
Mahoney, Hugh M.....Detroit
Maibauer, F. P.....Wyandotte
Maior, Roman H.....Detroit
Mair, Harold U.....Detroit
Maire, E. D.....Grosse Pointe
Malik, Edward A.....Detroit
Malik, Nur M.....Detroit
Malachowski, B. T.....Detroit
Malone, Herbert .....Detroit
Maloney, John A.....Detroit
Mancuso, Vincent S.....Detroit
Manting, Jacob .....Detroit
Maples, Douglas E.....Detroit
Marcotte, Oliver .....Detroit
Marcus, Daniel B.....Detroit
Marinus, Carleton J.....Detroit
Markel, Joseph M. .....Detroit
Markoe, Rupert C. L.....Detroit
Marks, Ben .....Detroit
Markuson, Kenneth.....East Lansing
Marsden, Thomas B.....Detroit
Marsh, Alton R.....Detroit
Marshall, James R.....Detroit
Martin, Edward G.....Detroit
Martin, Elbert A. .....Detroit
Martin, L. R.....Detroit
Martin, R. M.....Detroit
Martinez, P. O.....Detroit
Martmer, Edgar.....Grosse Pointe
Marwil, T. B.....Detroit
Mason, Percy W.....Detroit
Mateer, John G.....Detroit
Mathes, Charles J.....Detroit
Matthews, Wallace R.....Dearborn
Maun, Mark E. .....Detroit
May, Earl W.....Detroit
May, Frederick T., Jr.....Detroit
Mayer, E. V.....Detroit
Mayer, Willard D.....Detroit
Mayer, William L.....Detroit
Mayne, C. H.....Detroit
Mayner, Frank A.....Wyandotte
McAfee, F. W.....Detroit
McAlonan, Wm. T.....Detroit
McAlpine, Archibald D.....Detroit
McAlpine, Gordon S.....Detroit
McClellan, G. L.....Detroit
McClellan, Robert J.....Detroit
McClendon, James J.....Detroit
McClintock, J. J.....Detroit
McClure, Roy D.....Detroit
McClure, William R.....Detroit
*McColl, Charles W...Alexandria, La.
McColl, Clarke M.....Detroit
McColl, Kenneth M.....Detroit
McCollum, E. B.....Detroit
McCord, Carey P.....Detroit
McCormick, Colin C.....Dearborn
McCormick, Crawford W.....Detroit
McCullough, Lester E.....Detroit
McDonald, Allan W.....Detroit
McDonald, Angus L.....Detroit
McDonald, George O.....Detroit
McDonald, Peter W. .....Wyandotte
McDougall, B. W.....Detroit
McFadyen, Hugh A.....Detroit
McGarvah, A. W.....Detroit
McGarvah, Joseph A.....Detroit
McGillicuddy, Walter E.....Detroit
McGlaughlin, Nicholas ....Wyandotte
McGough, Joseph M.....Detroit
McGraw, Arthur B.....
Grosse Pointe Farms
McGuire, M. Ruth.....Detroit
McIntosh, W. V.....Detroit
McKay, Edwin B.....Detroit
McKean, G. Thomas.....Detroit
McKean, Richard M.....Detroit
McKenna, Charles J.....Detroit
McKinnon, John D.....Detroit
McLane, Harriett E.....Detroit
McLaughlin, Nelson .....Detroit
McLean, Don W.....Detroit
McLean, Harold G.....Detroit
McPhail, Malcolm .....Detroit
McPherson, R. J.....Detroit
McQuiggan, Mark R.....Detroit
McQuiggan, Paul .....Detroit
McRae, Donald H.....Detroit
Meader, F. M.....Detroit
Meek, Stuart F.....Grosse Pointe
Meinecke, Helmuth A.....Detroit
Mellen, Hyman S.....Detroit
Melnik, Maxim P.....Detroit
Menagh, Frank R.....Detroit
Mendelssohn, R. J.....Detroit
Merkel, Charles C.....
Grosse Pointe Village
Merrill, Lionel N.....Detroit
Merrill, William O.....Detroit
Merritt, Earl G.....Detroit
Metzger, Harry C.....Detroit
Meyers, M. P.....Detroit
Meyers, Solomon G.....Detroit
Miley, H. H.....Detroit
Miller, Daniel H. .....Detroit
Miller, Hazen L.....Detroit
Miller, Karl .....Detroit
Miller, Maurice P.....Trenton
Miller, Myron H.....Detroit
Miller, T. H.....Detroit
Mills, Clinton C.....Detroit
Mills, Georgia V.....Detroit
Miner, Stanley G.....Detroit
Minor, Edward G.....Detroit
Mintz, Edward I.....Detroit
Miral, Solomon P.....Detroit
Mishelevich, Sophie .....Detroit
Mitchell, C. Leslie.....Detroit
Mitchell, Gertrude F.....Detroit
Mitchell, W. Bede.....Detroit
Moehlig, Robert C.....Detroit
Moisides, V. P.....Detroit
Moll, Clarence D.....Detroit
Molner, Joseph G.....Detroit
Mond, Edward .....Detroit
Monfort, Willard .....Detroit
Montante, Jos. R.....Detroit
Montgomery, John C.....Detroit
Morand, Louis J.....Detroit
Moriarity, George .....Detroit
Morin, John B.....Detroit
Moritz, H. C.....Detroit
Morley, James A.....Detroit
Morrill, Donald M.....Detroit
Morris, Harold L.....Detroit
Morrison, Marjorie G. E.....Detroit
Morse, Plinn F.....Detroit
*Morton, David G.
Fort Sam Houston, Texas
Morton, J. B.....Detroit
Mosen, Max M.....Detroit
Moss, E. B.....Detroit
Muellenhagen, Walter J.....Detroit
Munro, Fred William.....Detroit
Munson, F. T.....Detroit
Muntyan, Andrew .....Detroit
Murphy, D. J.....Detroit
Murphy, Frank J.....Detroit
Murphy, John M.....Detroit
Murphy, Scipio G.....Detroit
Murphy, W. M.....Detroit
Murray, George M.....Detroit
Murray, William A.....Detroit
Muske, Paul H. .....Detroit
Musser, Fred C.....Detroit
Myers, Gordon B.....Detroit

Nagel, Oscar .....Detroit
Nagle, John W.....Wyandotte
Naud, Henry J. .....Detroit
Nawotka, Edward E.....Detroit
Naylor, A. E.....Detroit
Naylor, Arthur H.....Detroit
Neary, John H. .....Detroit
Neeb, Walter G.....Detroit
Nelson, Harry M.....Detroit
Nelson, Victor E.....Detroit
Neumann, Arthur J.....Detroit
Newbarr, Arthur A.....Detroit
Newman, Max Karl.....Detroit
Nichamin, Samuel J.....Detroit
Nickerson, Dean .....Detroit
Nigro, Norman D. .....Detroit
Nill, John B.....Detroit
Nill, William F.....Detroit
Nolting, Wilfred S.....Detroit
Norconk, A. A.....Detroit
Norris, Edgar H.....Detroit
Northcross, Daisy L.....Detroit
Northrop, Arthur K.....Detroit
Norton, Chas. S. .....Detroit
Noth, Paul H.....Grosse Pointe Farms
Novy, R. L. .....Detroit

Nowicki, Joseph A.....Detroit

O'Brien, E. J.....Detroit
O'Donnell, Dayton H.....Detroit
Ohmart, Galen B.....Detroit
O'Hora, James T.....Detroit
Olechowski, L. .....Detroit
Olenikoff, Alex .....Detroit
Olney, H. E.....Detroit
Oman, Cyrus F.....Detroit
Oppenheim, J. M.....Detroit
Oppenheim, Milton M.....Detroit
Organ, Fred W.....Detroit
Ormond, John K.....Detroit
O'Rourke, Randall M. .....Detroit
Osius, Eugene A.....Detroit
Osowski, Felix A. .....Detroit
Ottaway, John P.....Detroit
Ottrock, Anton .....Detroit
Owen, Clarence I.....Detroit
Owen, Robert G.....Detroit

Palmer, Hayden .....Detroit
Palmer, R. Johnston.....Detroit
Palmerlee, George H. .....Detroit
Pangburn, L. E.....Detroit
Panzner, Edward J.....Detroit
Parker, Walter R.....Detroit
Parr, R. W.....Detroit
Parsons, John P....Grosse Pointe Park
Pasternacki, Norbert T.....Detroit
Patterson, Walter G.....Detroit
Pawlowski, Jerome .....Detroit
Paysner, Harry A.....Detroit
Peabody, Charles William.....Detroit
Peacock, Lee W.....Detroit
Pearse, Harry A.....Detroit
Peggs, George F. .....Detroit
Peirce, Howard W.....Detroit
Penberthy, G. C.....Detroit
Pequegnot, Charles F.....Detroit
Perdue, Grace M.....Detroit
Perkin, Frank S.....Detroit
Perkins, Ralph A.....Grosse Pointe
Perlis, H. L.....Detroit
*Perry, Alvin LaForge..El Paso, Texas
Peterman, Earl A. .....Detroit
Pfeiffer, Rudolph L.....Detroit
Phillips, Fred W.....Detroit
Pickard, Orlando W.....Detroit
Pierce, Frank L.....Detroit
Pierson, Merle .....Detroit
Pinckard, Karl G.....Dearborn
Pink, Rose M. .....Detroit
Pinney, Lyman J.....Detroit
Pino, Ralph H.....Detroit
Piper, Clark C. .....Detroit
Piper, Ralph R.....Detroit
Plaggemeyer, H. W.....Detroit
Plain, George .....Detroit
Pliskow, Harold .....Detroit
Podezwa, J. W.....Hamtramck
Pollock, John J.....Detroit
Poole, Marsh W.....Detroit
Poos, Edgar E.....Detroit
Porretta, Anthony C.....Detroit
Porretta, F. S.....Detroit
Porter, Howard J.....Romulus
Posner, Irving .....Detroit
Potts, E. A.....Detroit
Pratt, Jean P.....Detroit
*Pratt, Lawrence...Fort Sheridan, Ill.
Prendergast, John J.....Detroit
Priborsky, Benjamin H.....Detroit
Price, A. H.....Detroit
Price, Alvin Edwin.....Detroit
Proud, Robert H.....Flat Rock
Ptolemy, H. H.....Detroit
Pugliesi, Benedetto .....Detroit
Purcell, Frank H.....Detroit
Putra, A. M. .....Detroit
Pyle, Wynand.....Mountclair, N. J.

Quigley, William .....Detroit

Rabinovitch, Bella .....Detroit
Rahm, Lambert P.....Detroit
Raiford, Frank P.....Detroit
Rand, Morris .....Detroit
Raskin, Morris .....Detroit
Rastello, Peter B.....Detroit
Ratigan, C. S.....Dearborn
Raynor, Harold F.....Detroit
Reberdy, George J.....Detroit
Reed, E. Hobart.....Grosse Pointe
Reed, H. Walter.....Detroit
Rees, Howard C.....Detroit
*Reid, Wesley G....Fort Benning, Ga.
Reiff, Morris V.....Detroit
Reinbolt, Charles A.....Detroit
Reinsh, Ernest R.....Detroit
Rekshaw, W. R.....Dearborn
Renaud, G. L.....Detroit
Rennell. Leo P.....Detroit
Renz, Russell H.....Detroit
Repp, William A.....Detroit
*Reske, Alven..Fort Sam Houston, Tex.
Reveno, William S.....Detroit
Rexford, Walton K.....Detroit
Reye, H. A.....Detroit
Reyner, C. E.....Detroit
Reynolds, Lawrence .....Detroit
Reynolds, R. P.....Detroit
Rezanka, Harold J.....Detroit
Rhoades, F. P.....Detroit
Rice, C. Malcolm, Jr.....Detroit
Rice, Harold B.....Detroit
Rice, Meshel .....Detroit
Richards, R. Milton .....Detroit
Richardson, Allan L.....Detroit
Richardson, Robert P. .....Wayne
Richey, Bert R.....Detroit
Rick, Paul .....Detroit
Ridge, Ralph W.....Wyandotte
Ridley, Edward R.....Detroit
Rieckhoff, George G.....Detroit
Rieger, John B.....Detroit
Rieger, Mary H.....Detroit
Riseborough, E. C.....Detroit
Rizzo, Frank .....Detroit
Robb, Edward L.....Detroit
Robb, Herbert F.....Belleville
Robb, J. M.....Grosse Pointe Village
Roberts, Arthur J.....Ecorse
Robertson, A. E.....Detroit
Robertson, Stanley B.....Detroit
Robertson, Tom H.....Detroit
Robillard, Henry .....Detroit
Robinson, George W.....Detroit
*Robinson, Harold A..Scott Field, Ill.
Robinson, R. G.....Detroit
*Rogers, A. Z.....Grosse Pte. Woods
Rogers, James D.....Wyandotte
Rogin, James R.....Detroit
Rogoff, A. S.....Detroit
Rohde, Paul C.....Detroit
Roman, Stanley J.....Detroit
*Root, Charles T...Fort Sam Houston
Rosbolt, Oscar P.....Detroit
Rose, Bernard .....Detroit
Rosenman, J. D.....Detroit
Rosenthal, Louis H.....Detroit
Rosenthall, M. J.....Detroit
Rosenwach, Felix F.....Detroit
Rosenzweig, Saul .....Detroit
Ross, D. G.....Grosse Pointe
Ross, Ben C.....Detroit
Ross, Samuel H.....Detroit
Rotarius, E. M.....Detroit
Roth, Theodore I.....Detroit
Rothbart, H. B.....Detroit
Rothman, Emil D.....Detroit
Rottenberg, Leon .....Detroit
Rowda, Michael S.....Detroit
Rowell, Wilfred J.....Detroit
Rubright, LeRoy W.....Detroit
Rucker, Julian J.....Detroit
Rueger, Milton J. .....Detroit
Rueger, Ralph C.....Detroit
Runge, Edward F. .....Detroit
Rupp, Jacob R.....Detroit
Rupprecht, Emil F.....Detroit
Ruskin, Samuel H. .....Eloise
Russell, John C.....Detroit
Ryan, Charles F.....Detroit
Ryan, W. D.....Detroit
Rydzewski, Joseph B.....Detroit
Ryerson, Frank L.....Detroit

Sachs, Herman K.....Detroit
Sachs, Ralph Robert.....Detroit
Sack, A. G.....Detroit
Sadowski, Roman .....Detroit
Sage, Edward O.....Dearborn
Sager, E. L.....Detroit
St. Louis, R. J.....Detroit
Salchow, Paul T.....Detroit
Salisbury, Howard W.....Dearborn
Salowich, John N.....Detroit
Saltzstein, Harry C.....Detroit
Sander, I. W.....Detroit
Sanders, Alex W.....Detroit
Sanderson, Alvord R.....
Grosse Pointe Park
Sanderson, James H.....Detroit
Sanderson, Suzanne .....Detroit
Sandler, Nathaniel .....Detroit
Sandweiss, David J.....Detroit
Sanford, Hawley S.....Detroit
Sands, G. E.....Detroit
Sargent, William R.....Detroit
Savignac, Eugene M. .....Detroit
Sawyer, Harold F.....Detroit
Scarney, Herman D.....Detroit
Schaefer, Robert L.....Detroit
Schaeffer, Martin .....Detroit
Schembeck, I. S.....Detroit
Schenden, A. J.....Melvindale
Schinagel, Geza .....Detroit
Schlacht, George F. .....Romulus
Schlafer, Nathan H.....Detroit
Schmidt, Harry B.....Detroit
Schmidt, Milton R.....Trenton
Schmier, Burton L. .....Detroit
Schmitt, Norman L.....Detroit
Schneck, Robert J.....Detroit
Schneider, Curt P.....Detroit
Schoenfield, Gilbert D.....Detroit
Schooten, Sarah S.....Detroit
Schreiber, Frederick .....Detroit
Schroeder, Carlisle F.....Detroit
Schultz, Ernest C.....Detroit
Schultz, Robert F.....Detroit
Schwartz, H. Allen.....Detroit
Schwartz, Louis A.....Detroit
Schwartz, Oscar D.....Detroit
Schwartzberg, Jos. A.....Detroit
Schweigert, C. F.....Detroit
Sciarrino, Stanley V.....Detroit
Scott, R. J.....Detroit
Scott, Wm. J. ....Grosse Pointe Farms
Scruton, Foster D.....Detroit
Seabury, Frank P.....Detroit
Secord, Eugene W. .....Detroit
Seeley, Ward F.....Detroit
Segar, Lawrence F.....Detroit
Seibert, Alvin H.....Detroit
Selby, C. D.....Detroit
Seliady, Joseph E.....Northville
Sellers, Charles W.....Detroit
Selling, Lowell .....Detroit
Selman, J. H.....Detroit
Sewell, George S.....Detroit
Seymour, William J.....Detroit
Shafarman, Eugene .....Detroit
Shaffer, Joseph H.....Detroit
Shaffer, Loren W...Grosse Pointe Park
Shafter, Royce R.....Detroit
Sharrer, Charles H.....Detroit
Shaw, Robert G.....Detroit
Shawan, H. K.....Detroit
Shebesta, Emil .....Detroit
Sheldon, John A.....Detroit
Shelton, C. F.....Detroit
Sheridan, Charles R.....Detroit
Sherman, B. B.....Detroit
Sherman, William L.....Detroit
Sherrin, Edgar R.....Detroit
Sherwood, DeWitt L.....Detroit
Shields, William L.....Detroit
Shifrin, Peter G.....Detroit
Shlain, Benjamin .....Detroit
Shore, O. J.....Detroit
Shotwell, Carlos W.....Detroit
Shulak, Irving B.....Detroit
Shurly, Burt R.....Detroit
Siddall, Roger S.....Detroit
Siefert, John L.....Detroit
Siefert, William A.....Detroit
Siegel, Henry .....Dearborn
Sill, Henry W.....Detroit
Silvarman, I. Z.....Detroit
Silverman, M. M.....Detroit
Simon, Emil R. .....Dearborn
Simpson, C. E.....Detroit
Simpson, H. Lee.....Detroit
Sippola, George W.....Detroit
Sisson, John M.....Detroit
Siwka, Isidore J. .....Detroit
Skinner, W. Clare.....Detroit
Skolnick, Max H.....Detroit
Skrzycki, Stephen S.....Detroit
Skully, E. J.....Detroit
Skully, G. A.....Detroit
Sladen, Frank J.....Detroit
Slate, Raymond N.....Detroit
Slaugenhaupt, J. G.....Detroit
Slaughter, Wayne B.....Detroit
Slazinski, Leo W.....Detroit
Slevin, John G.....Detroit
Slipson, Edith G.....Detroit
Sliwin, Edward P.....Detroit
Small, Henry .....Detroit
Smeck, Arthur R.....Detroit
Smeltzer, Merrill .....Detroit
Smith, Clarence V.....Detroit
Smith, Claude A.....River Rouge
Smith, Eugene, Jr. .....Detroit
Smith, F. Janney.....Detroit
Smith, Fred R.....Detroit
Smith, Gerritt Calvin.....Detroit
Smith, Henry L.....Detroit
Smith, J. Allen.....Detroit
Smith, James A.....Detroit
Smith, L. Lloyd.....Detroit
Snedeker, Bernard C....Highland Park
Snow, L. W.....Northville
Socall, Charles J.....Detroit
Sokolov, Raymond A.....Detroit
Somers, Donald C.....Detroit
Sonda, Lewis P.....Detroit
*Sorock, Milton L. .....Fort Custer
Souda, Andrew .....Wyandotte

Spademan, Loren C.....Detroit
Spalding, Edward D.....Detroit
Sparling, Harold I.....Northville
Sparling, Irene L.....Northville
Speck, Carlos C.....Detroit
*Spector, Maurice J...Fort Sill, Okla.
Spencer, Frank .....Detroit
Spero, Gerald D.....Detroit
Sperry, Frederick L.....Detroit
Spiro, Adolph .....Detroit
Springborn, B. R.....Detroit
Sprunk, Carl .....Detroit
Sprunk, John P.....Detroit
Squires, W. H.....Eloise
Stafford, Frank W. J.....Detroit
Stageman, John Condon.....Detroit
Stalker, Hugh .....Grosse Pointe
Stamell, Meyer .....Detroit
Stamos, Harry F.....Detroit
Stanton, James M.....Detroit
Stapleton, William J., Jr.....Detroit
Starrs, Thomas C.....Detroit
Stefani, E. L.....Detroit
Stefani, Raymond T.....Detroit
Stein, Emory .....Detroit
Stein, Saul C.....Detroit
Steinbach, Henry B.....Detroit
Steinberger, Eugene .....Detroit
Steiner, Max .....Detroit
Steinhardt, Milton J.....Detroit
Stellhorn, Chester E.....Detroit
Stellhorn, Mary Christine.....Detroit
Sterling, Lawrence .....Detroit
Sterling, Robert R.....Detroit
Stern, Edward A.....Detroit
Stern, Harry L.....Detroit
Stern, Louis D.....Detroit
Stevens, Rollin H.....Detroit
Stewart, Harry L.....Detroit
Stewart, Thomas O.....Detroit
Stirling, Alex M.....Detroit
Stockwell, B. W.....Detroit
Stokfisz, T.....Detroit
Stout, Lindley H. .....Detroit
Stover, R. F. .....Detroit
Straith, Claire L.....Detroit
Stricker, Henry D.....Detroit
Strickland, C. C.....Detroit
Strickroot, Fred L.....Detroit
Strohschein, Don F.....Detroit
Struthers, J. N. P. .....Detroit
Stubbs, C. T. .....Detroit
Stubbs, Harold W.....Detroit
Sugarman, Marcus H.....Detroit
Sullivan, Hugh A.....Detroit
Summers, William S.....Detroit
Surbis, John P.....Detroit
Sutherland, J. M.....Detroit
Swanson, Cleary N.....Detroit
Swartz, J. N.....Detroit
Swift, Karl L.....Detroit
Switzer, B. C.....Detroit
Syphax, Charles S., Jr.....Detroit
Szappanyos, Bela T.....Detroit
Szedja, J. C.....Detroit
Szmigiel, A. J. .....Detroit

Tamblyn, E. J.....Detroit
Tann, H. E.....Detroit
Tapert, R. T.....Detroit
Tassie, Ralph N.....Detroit
Tatelis, Gabriel .....Detroit
Taylor, Nelson M.....Grosse Pointe
Taylor, Reu Spencer.....Detroit
Tear, Malcolm J.....Detroit
Teitelbaum, Myer .....Detroit
Tenaglia, Thomas A.....Ecorse
Texter, Elmer C.....Detroit
*Thomas, Alfred E..Fort Bragg, N. C.
Thomas, Fred W.....Detroit
Thompson, H. O.....Detroit
Thompson, James B.....Detroit
Thompson, W. A.....Detroit
Thomson, Alexander .....Detroit
Thosteson, George C.....Detroit
Tomsu, Charles L.....Detroit
Top, F. H.....Detroit
Torrey, H. N.....Detroit
Townsend, Frank M.....Detroit
Trask, Harry D.....Detroit
Tregenza, W. Kenneth.....Detroit
Trinity, Granville J. .....Detroit
Troester, George A.....Detroit
Trombley, Bryan .....Detroit
Trombley, Joseph J., Jr.....Detroit
Troxell, Emmett C.....Detroit
Truszkowski, E. G. .....Hamtramck
Tryon, Mary .....Detroit
Trythall, S. W.....Detroit
Tufford, Norman G.....Detroit
Tulloch, John .....Detroit
Tupper, Roy D.....Detroit
Turbett, Claude W.....Detroit
Turcotte, Vincent J.....Detroit
Turkel, Henry .....Detroit

Ulbrich, Henry L.....Detroit
Ulrich, Willis H.....Detroit
Umphrey, Clarence E.....Detroit
Usher, William Kay.....Detroit

Vale, C. Fremont.....Detroit
VanBaalen, M. R.....Detroit
VanBeceLaere, Lawrence H.....Ecorse
Van de Velde, Honore.....Detroit
VanGundy, Clyde R.....Detroit
Van Heldorf, Harry.....Detroit
Van Rhee, George .....Detroit
Van Riper, Steven L.....Eloise
Vardon, Edward M.....Detroit
Vasu, V. O.....Detroit
Vergosen, Harry E. .....Detroit
Vernier, Jean A.....Detroit
Vincent, J. LeRoi.....Wayne
Voegelin, Adolph E.....Detroit
Voelkner, George H.....Detroit
Vogel, Hyman A. .....Detroit
Vokes, Milton D.....Detroit
Von der Heide, E. C.....Detroit
Voorheis, Wilbur J.....Detroit
Vossler, A. E.....Detroit
Vreeland, C. Emerson.....Detroit

Waddington, Joseph E. G.....Detroit
Wadsworth, George H. .....Detroit
Waggoner, C. Stanley.....Detroit
Wainger, M. J.....Detroit
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Walker, Enos G.....Detroit
Walker, J. Paul .....Detroit
Walker, Roger V.....Detroit
Wallace, S. Willard.....Detroit
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Walser, Howard C.....Detroit
Walsh, Charles R.....Detroit
Walters, Albert G.....Detroit
Waltz, Frank D. B. .....Detroit
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Ward, W. K.....Detroit
Warden, Horace F. W.....Detroit
Warner, Harold W. .....Detroit
Warner, P. L.....Detroit
Warren, Wadsworth .....Detroit
Watson, Ernest Hamilton
.....Grosse Pointe Park
Watson, Harwood G.....Dearborn
Watson, J. Edwin.....Detroit
Watson, Robert W.....Highland Park
Watts, Frederick B.....Detroit
Watts, John J.....Detroit
Wax, John H.....Detroit
Wayne, M. A.....Detroit
Weaver, Clarence E.....Detroit
Wehenkel, Albert M.....Detroit
Weiner, M. B.....Detroit
Weingarden, David H.....Detroit
Weinstein, Jacob .....Detroit
Weisberg, Harry .....Detroit
Weisberg, Jacob .....Detroit
Weiser, Frank A.....Detroit
Welch, John H.....Detroit
Weller, Charles N.....Detroit
Wellman, W. W.....Detroit
Wells, Martha .....Detroit
Weltman, Carl .....Detroit
Wendel, Jacob S.....Detroit
Wenzel, Jacob F. .....Detroit
Wershow, Max .....Detroit
Westlund, Norman .....Dearborn
Weston, Earl E.....Detroit
Westover, Charles .....Detroit
Weyher, Russell F.....Detroit
Whalen, Neil J.....Detroit
Wharton, Thomas V. .....Detroit
White, Milo R.....Detroit
White, Prosper D.....Detroit
Whitehead, L. S.....Detroit
*Whiteley, Robt. E...Philippine Islands
Whitney, Elmer L.....Detroit
Whitney, Rex E.....Detroit
Whittaker, Alfred H.....Detroit
Wiant, R. E.....Detroit
Wickham, A. B.....Detroit
Wiener, I. .....Detroit
Wight, Fred B.....Detroit
Wilcox, Leslie F.....Detroit
Wilkinson, Arthur P.....Detroit
Williams, C. J.....Detroit
Williamson, Edwin M. .....Detroit
Willis, Henry S. .....Northville
Willis, Willard S. .....Detroit
Wills, J. N.....Detroit
*Willson, Wesley W.
Fort Sheridan, Ill.
Wilson, C. Stuart.....Detroit
Wilson, Gerald A.....Detroit
Wilson, James Leroy.....Detroit
Wilson, John D.....Detroit
Wilson, M. C. .....Detroit
Wilson, Walter J.....Detroit
Wilson, Walter J., Jr.....Detroit
Winfield, James M.....Detroit
*Winsor, Carlton Webb..Porto Rico
Wishropp, E. A.....Detroit
Wissman, H. C.....Detroit
Wittenberg, Arthur A.....Detroit
Wittenberg, Samson S.....Detroit
Wittenberg, Sydney S.....Detroit
Witter, Frank C.....Detroit
Witter, Joseph A.....Detroit
Witus, Morris .....Detroit
Witwer, Eldwin R..Grosse Pointe Park
Wolfe, Max O. .....Detroit
Wollenberg, Robert A. C.....Detroit
Woodry, Norman L.....Detroit
Woods, H. B. .....Detroit
Woods, W. Edward.....Detroit
Woodworth, William P.....Detroit
Wreggit, W. R.....Highland Park
Wruble, Joseph .....Detroit
Wygant, Thelma .....Detroit

Yesayian, H. G.....Detroit
Yonkman, Frederick F.....Detroit
Yott, William J.....Detroit
Young, Donald Andrew .....Detroit
Young, Donald C.....Detroit
Young, James P.....Detroit
Young, Lloyd B.....Detroit
Young, Viola M.....Detroit

Zbudowski, A. S.....Detroit
*Zbudowski, Myron R.....Fort Custer
Zemens, Joseph L.
Grosse Pointe Woods
Zielinski, Charles J.....Detroit
Zimmerman, Israel J.....Detroit
Zimmerman, R. L. .....Detroit
Zinn, George H.....Detroit
Zinterhofer, John .....Detroit
Zinterhofer, Louis .....Detroit
Zlatkin, Louis .....Detroit
Zolliker, Carl R.....Detroit
Zukowski, Sigmind A. .....Detroit

## Wexford-Kalkaska-Missaukee Counties

Albi, R. W.....Lake City
Brooks, G. W.....Tustin
Gruber, John F.....Cadillac
*Hoagland, F. L. .....Porto Rico
Holm, Augustus.....Leroy
Holm, Benton .....Cadillac
Hoverter, J. W.....Evart
Laughbaum, T. R.....Lake City
McCall, James H.....Lake City
McManus, Edwin.....Mesick
Masselink, H. J.....McBain
Merritt, C. E.....Manton
Mills, Robert E.....Boon
Moore, G. P.....Cadillac
Moore, Sair C.....Cadillac
Murphy, Michael R.....Cadillac
Purdy, Calvin S.....Buckley
Seltzer, Sol N. .....Marion
Showalter, Laurence E.....Cadillac
Smith, Wallace J.....Cadillac
Tornberg, D. C. .....Cadillac
Wood, George H.....Reed City

# What Value Membership?

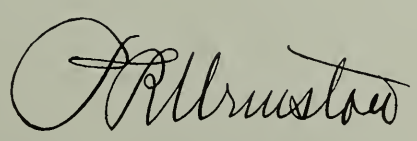
*President's*

*Page*

The value of membership in the Michigan State Medical Society, as in any organization, depends upon the interest and activity of the individual member. In the vernacular, "one gets out of an organization just what he puts into it."

However, there are certain advantages which accrue unconsciously and automatically to every member of the Michigan State Medical Society, whether he stops to "clip his coupons" or not. These have been classed as: I. Educational and Professional, II. Economic, and III. Sociologic. They are the valuable "intangibles" which cannot be grasped like a silver dollar, but are comparable to government bonds which of themselves are mere bits of printed paper but represent and are backed by the wealth of the nation.

The *greatest benefit* of membership comes from the very membership itself—the joining of hands and working together, i.e., **Unity!** A united medical profession can readily achieve and hold its rightful position of influence and leadership in the community and the State. The maintenance of these qualities of influence and leadership is, therefore, the responsibility of every one of the individual members of the Michigan State Medical Society. Stand fast, together, as one!



President, Michigan State Medical Society

# EDITORIAL

## MUSKEGON HONORS GEORGE L. LE FEVRE

■ George L. LeFevre, M.D., president of the Michigan State Medical Society in 1932-33, finished his fiftieth year of active practice March 19, 1941. The Muskegon County Medical Society obtained the coöperation of the Muskegon County Dental Society, the Chamber of Commerce and the Rotary Club in honoring "Dr. George," as he is familiarly known, in a community banquet.

Leaders of almost all groups of the city were present and voiced their respect and admiration for Doctor LeFevre.

The principal address, "The Army's Dependence upon the Medical Profession," was given by Dr. Burton R. Corbus, ex-president of the Michigan State Medical Society and close friend of Doctor LeFevre.

The Michigan State Medical Society was represented by President P. R. Urmston and Secretary L. F. Foster. Doctor Urmston conveyed to the honored guest the congratulations and recognition of service from the profession of Michigan.

"Dr. George's" record is best expressed by the following editorial from the *Muskegon County Medical Society Bulletin:*

It is not given to many doctors of medicine to complete fifty years of activity in their profession. That experience alone makes a community celebration noteworthy. Fifty years of practice means that many generations of one family have been cared for by one physician and that his name has become almost a tradition in that family. There are a number of these families, in Muskegon, to whom "Dr. George" has been the symbol for relief from pain and surcease from travail.

It is not given to many physicians to be elected president of a great state medical society. That election means that his colleagues recognize the unselfish work he has done over a period of many years, and also his unusual executive ability and leadership.

It is not given to many physicians to be the Chief-of-Staff in a large hospital for thirty-eight years and be the main activating influence of its growth.

It is not given to many physicians to be president of a great bank, a large bank, to share the responsibility of the financial structure of a city.

It is not given to many physicians to have an active leading part in the political administration of a community and guide its development.

It is not given to many physicians to be a leader of an active industrial foundation which has strengthened the backbone of his home city.

It is not given to many physicians to be a prominent member of a city's service, fraternal, and social organizations.

It is not given—but we could go on for another page or two listing the accomplishments recorded and the honors given; not just one, or two, or three of them, but *all* to George L. LeFevre.

The Muskegon County Medical Society has invited the Muskegon County Dental Society, the Greater Muskegon Chamber of Commerce, and the Rotary Club to join in a community banquet honoring the only physician in Michigan who has achieved, the hard way, all these honors.

It redounds to the credit of the entire medical profession and particularly the Muskegon County Medical Society that our "Dr. George" is the honored guest of such a meeting.

---

## THE AMA NEEDS A NEW CHARTER

■ The American Medical Association and its local society in Washington, D. C., have been convicted by a federal jury of violating the anti-trust law. At the same time the jury acquitted all of the individual defendants, who included the principal executive employés of the association.

This verdict had a parallel some months ago in the federal court at South Bend, where the General Motors corporation was convicted of violating the anti-trust laws in financing the sale of its cars, but all of the officers of the corporation were acquitted. This, as it turned out, was most fortunate for Mr. Roosevelt. It saved him the embarrassment of plucking one of the defendants, Mr. Knudsen, out of jail when he needed him to head OPM.

The jurors seem to have been in no doubt that a crime was committed, yet when they were asked to say who committed it their answer was, "Nobody." Perhaps the legal metaphysicians can straighten us out. Queries might well be addressed to the prosecutor of the case, Mr. Thurman Arnold, who has written that anti-

trust prosecutions are a sham anyway, being designed to propitiate the public conscience for allowing acts that our moral sense tells us are wrong but which our practical judgment says are necessary.

The charge against the doctors at Washington was that they engaged in a conspiracy in restraint of trade against the Group Health association, an organization that undertook to furnish government employés with medical care in return for a flat monthly fee. The AMA asserts that arrangements of this type tend to lower the standards of medical care, and in consequence its members, at the instigation of the association's leaders, refused to have any professional relations with the physicians hired by the Group Health organization.

The anti-trust conviction may impress upon the members of the AMA that when they organized they took out the wrong kind of a charter. They should have applied to William Green or John L. Lewis. So equipped, they would not have been reduced to refusing to practice in the same hospitals with a physician who signed up with Group Health. Dr. Morris Fishbein could just have gone around some evening and broken the wrong guy's fingers with a blackjack, an operation that does a surgeon no more good than it does a musician, and Mr. Justice Frankfurter would have told Thurman Arnold not to get himself all wrought up over a passing moment of animal exuberance.

A good broad AFL or CIO charter would solve a lot of the medical profession's economic problems. Its members would not have to worry about overproduction of doctors. They could just close their membership rolls and have some of their members, sitting on the state and local examining boards, prosecute the newcomers for practicing without a license.

Draft boards wouldn't be asking physicians to give their services free for examination of the draftees. All the chest thumping in charity wards would be done at the union scale and any non-union medico who tried to cut in on the business would have to pay $1,000 initiation fee. Ladies expecting offspring would have to be careful that the labor pains did not start after 4 p. m. on a Friday; otherwise Papa would have to pay double time for a week-end delivery.

The medical union might be able to take on a number of profitable activities that AMA members now deny themselves, such as performing abortions or, for a suitable fee, slipping a dose from the black bottle to millionaires whose heirs were growing impatient. While such activities might arouse public protest, the union docs could be sure that President Green would not bother them. That would be interfering with their autonomy.—Editorial, *Chicago Daily Tribune,* Monday, April 7, 1941. Reprinted by special permission.

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FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course starting June 30. Informal Course every week.

GYNECOLOGY—Two Weeks Intensive Course starting June 16 and October 20. Clinical, Diagnostic and Didactic Course every week.

OBSTETRICS—Two Weeks Personal Course starting May 26. Two Weeks Intensive Course starting October 6. Informal Course every week.

OTOLARYNGOLOGY—Two Weeks Intensive Course starting September 8. Informal and Personal Courses every week.

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# YOU AND YOUR BUSINESS

## MEMBERSHIP INCREASE

January 1, 1934, 3160 members
January 1, 1935, 3393 members
January 1, 1936, 3650 members.
January 1, 1937, 3725 members.
January 1, 1938, 3963 members.
January 1, 1939, 4205 members.
January 1, 1940, 4383 members.
January 1, 1941, 4521 members.

The Michigan State Medical Society has gained 1,361 members in seven years, an increase of over 30 per cent.

A few eligible Doctors of Medicine are not members of their county and state societies. Members are urged to invite their reputable confreres to become associated with them in their medical organization activities.

## LEGISLATION FOR CRIPPLED AND AFFLICTED CHILDREN

The Executive Committee of The Council, Michigan State Medical Society, has gone on record approving House Bill No. 317 and Senate Bill No. 250 (identical bills) to simplify administration of laws dealing with afflicted and crippled children. This proposal has also been approved by the American Legion, Forty and Eight, Veterans of Foreign Wars, Michigan Crippled Children Society, Michigan Hospital Association, Michigan Welfare League and by members of the Michigan Crippled Children Commission.

This bill will eliminate unnecessary duplication and investigation (and permanent confusion) by placing authority and responsibility in one body (the commission)—not in *three* agencies, as has been Michigan's unfortunate experience during the past six years. Elimination of a multi-headed administration will solve most of the problems which have plagued the administration of laws covering the care of crippled and afflicted children.

Sincerely believing that HB-317 and SB-250 will best serve the unfortunate children, properly remunerate the purveyors of the various services, and protect the authorities charged with payment for services, the Michigan State Medical Society not only endorses this measure, but urges its members actively to help towards the early passage of this fine proposal.

Doctors, as physicians and as taxpayers, are invited by the Michigan State Medical Society officers to do all in their power to streamline these laws which intimately touch their daily practice. This can be done only by effective legislative contact.

## WORKMEN'S COMPENSATION LAW ON CHOICE OF HEALER

"Is an employer responsible for bills incurred by an injured workman who seeks aid from a healer other than a doctor selected by the employer?"

This question was recently asked by the medical director of a large Michigan corporation.

The answer is that an employer is *not* responsible for bills incurred by an injured workman who seeks aid from a healer, other than the doctor selected by the employer, without the knowledge of the employer (except in an emergency where life is in danger and where the employer has been notified within a reasonable period of time after rendition of any first-aid services).

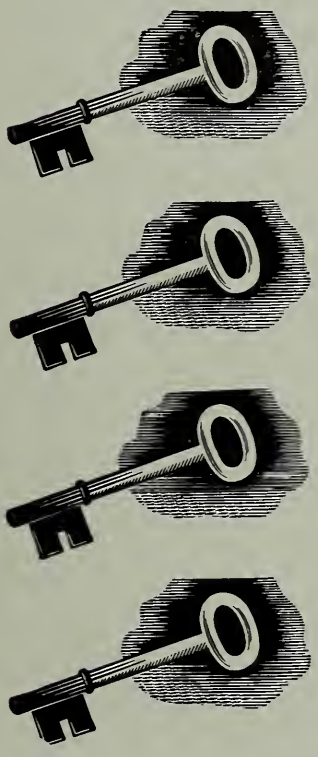
The medical director of a corporation is not under any compulsion, by the state law, to refer an injured workman to a healer, other than the doctor selected by the corporation, for the care of injuries, even at the workman's insistence. All supreme court cases in Michigan on this point state that the employer generally has the right to choose a doctor for his employee (Gardner v. Michigan, 231 Mich. 331 is the leading Supreme Court decision).

In the Workmen's Compensation Act, Section 8420 reads: "During the first ninety days after the injury the employer shall furnish or cause to be furnished reasonable medical, surgical and hospital services and medicines when they are needed." Therefore, it is the right and responsibility of the *employer only* to select medical services for injured employees; the desires of the insurance carrier or the demands of the employee to seek the services of healers other than the doctor of medicine selected by the employer are of no legal avail.

*(Continued on Page 392)*

A Reminder from Borden about

# FOUR KEY PRINCIPLES IN INFANT FEEDING



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Of course, where an employer sends his employee to a certain healer, whether he be a doctor of medicine or not, and authorizes the healer to perform certain services on the employee, then the healer has the legal right to be compensated for his services (290 Michigan, 397).

In an emergency, *where life is in danger,* an employee may go to his own doctor—but a notification to the employer is necessary if the healer's charges for his first service are to be recognized by the employer or by his insurance company (206 Michigan, 25 and 286 Michigan, 285).

To sum up, a medical director is under no legal compulsion to refer an injured workman, at the workman's request, to a healer (other than the doctor of medicine selected by the employer) for care of injuries covered by the Michigan Workmen's Compensation Act.

## MILITARY MEMBERSHIP

Members of the Michigan State Medical Society in good standing for the year 1940 who are called into active military service away from home shall be relieved of the payment of State dues during the period of such active service. Members who have already paid their 1941 dues and have since been called into active military service away from home shall be accorded, upon their return home, one year's membership without the payment of the State dues.

It is to be understood that such relief from the payment of State dues can only be accorded physicians who have already been members of the Michigan State Medical Society and who have paid dues for at least one year.

Newly elected members since 1940 must pay one year's dues. Subsequent State dues will then be waived during the period of such members' active military service away from home.

## "MALPRACTICE FEVER"

It is a recognized fact that when, in a given locality, a malpractice action against a physician has been decided in favor of the plaintiff, other persons with grievances are spurred to action, and, should there be an attorney in the locality who is "in the market" for business of this kind, an epidemic of suits against physicians is likely to result. Unquestionably, the best defense against such suits is their prevention.—*Samuel Wright Donaldson, A. B., M. D., F. A. C. R. The Roentgenologist in Court. Charles C. Thomas, 1937.*



*Say you saw it in the Journal of the Michigan State Medical Society*

## NEW LOW DEATH RATES

New low Michigan death rates per 100,000 population were written in 1940 for pneumonia and tuberculosis, among the ten leading causes of death, and also for typhoid and diphtheria, which a generation ago were in the state's big ten.

High and low rates and death totals over the last forty years are:

**Pneumonia—1940 rate 47.15, deaths 2,478. Previous rates: lowest 53.75 in 1939, highest 210 in 1918. Previous death totals: lowest 2,276 in 1909, highest 7,238 in 1918.**

**Tuberculosis—1940 rate 33.35, deaths 1,753. Previous rates: lowest 36.07 in 1939, highest 107.15 in 1904. Previous death totals: lowest 1,881 in 1939, highest 3,612 in 1900.**

**Diphtheria—1940 rate .40, deaths 21. Previous rates: lowest .48 in 1939, highest 25.20 in 1921. Previous death totals: lowest 25 in 1939, highest 954 in 1921.**

**Typhoid—1940 rate .19, deaths 10. Previous rates: lowest .48 in 1939, highest 34.03 in 1900. Previous death totals: lowest 25 in 1938, highest 824 in 1900.**

One smallpox death was reported in 1940, that of a sixty-five-year-old man. Michigan had no smallpox deaths in 1939 and previously there had been six years without a death.

Scarlet fever deaths in 1940 dropped to 41 and a rate of .78, both new lows. A decline in virulence of the organism is considered the explanation for the low number of deaths. The worst scarlet fever year of the last forty was in 1917, when there were 340 deaths.

## PNEUMONIA DEATHS DROP

**In the three years that pneumonia treatment in Michigan has been generally changed by the use of sulfonamide drugs and by serums, pneumonia deaths in the state have been cut 25 per cent.**

The average for the years 1938, 1939 and 1940 is 2,717 deaths, which compares with 3,613 for the previous ten years and 3,592 for the previous five. There was, then, an average of approximately 900 fewer deaths per year during the past three years than during the preceding five or ten year periods.

The drop in pneumonia deaths in 1940 over 1939 is 325, and some part of this reduction may be credited to therapy with serums and with sulfapyridine and sulfathiazole.

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A complete technique of treatment and literature will be sent upon request

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Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by Neisseria gonorrheae.[1] An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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On a national scale, the outstanding public health news for 1940 has been declared to be a large reduction in the pneumonia death rate, as forecast by insurance company studies. In Michigan, a reduction in the pneumonia death rate is also of major importance. The rate for the ten years 1928-37 was 72 deaths per 100,000 population. During the past three years the rate has been about 50 a reduction of one-third.

## FREE SULFATHIAZOLE

Starting in April, sulfathiazole will be added to the drugs and supplies distributed free to physicians by the Michigan Department of Health for treatment of venereal disease. Sulfathiazole is the first drug distributed generally for treatment of gonorrhea.

As with other drugs for treatment of venereal disease, the sulfathiazole will be distributed in the usual manner by the State Health Department in unorganized territory and by county and district health departments elsewhere after a case of gonorrhea has been reported and request made for the drug. Enough sulfathiazole is sent for one patient to give what is considered a therapeutic course—60 grains a day for five days. The tablets are 7½ grains, 40 tablets to the bottle.

Drugs and materials now distributed by the Department to physicians for treatment of venereal disease include: neoarsphenamine, mapharsen, trisodarsen, bismuth subsalicylate, distilled water, and sulfathiazole.

## NEW ACTING DEPUTY COMMISSIONER

Dr. Carleton Dean, Deputy Commissioner of the Michigan Department of Health and director of the Bureau of Local Health Service since January 1, 1940, has been appointed medical director of the Michigan Crippled Children's Commission. Dr. Dean resigned effective April 1, to take his new position on that date. His offices will be in Lansing in the Hollister building.

Dr. Dean is a former member of the State Council of Health and a past president of the Michigan Public Health Association. He joined the Department staff from a district health department position, coming to Lansing from Charlevoix where he had been director for ten years of District Health Department No. 3.

Promotion of Dr. E. V. Thiehoff to be Acting Deputy and also to be director of the Bureau of Local Health Services was announced shortly after Dr. Dean's resignation.

The advancement of Dr. Thiehoff came just a year after he had joined the Department staff, also from a district health department position. Dr. Thiehoff was the first director of District Health Department No. 7, comprising Gladwin, Clare, and Arenac counties. He served the district from 1935 until April 1, 1940, when he was appointed assistant to Dr. Dean.

Dr. Thiehoff entered public health work in 1925. He has a master's degree in public health from Johns Hopkins University. His first work in public health was as assistant director of the Bureau of Child Hygiene of the Missouri Board of Health. After a year, he was named city physician in the Akron, Ohio, health department, and later chief of the child hygiene service there. In 1932, he was named acting director of the Cleveland Child Health Association. He served there until 1934, when he went to Vienna to study.

Since January 27, he has been making appraisals of county and district health departments.



*Say you saw it in the Journal of the Michigan State Medical Society*

# Woman's Auxiliary

This is the *Last Call* for reservations for the Nineteenth Annual Convention of the Woman's Auxiliary to the American Medical Association which will be held at Hotel Carter in Cleveland, June 2-6. All Cleveland extends a hearty welcome to you!

**Ingham County**

In February, the Ingham County Auxiliary held its annual dessert bridge party at the home of Mrs. Harry Prall in East Lansing.

Mrs. H. A. Miller our social chairman, recently returned from Mexico, brought beautiful bridge prizes typical of the country. Mrs. Horace French, State Treasurer, and one of Lansing's foremost bridge experts, had the high score for the afternoon. Others winning the lovely Mexican gifts were Mrs. L. G. Christian, Mrs. F. Mansell Dunn and Mrs. F. C. Swartz.

At the business meeting we discussed the coming month of April in regard to the drive for the control of cancer, and we shall try to enroll every one in the Ingham County Auxiliary as a member of the Women's Field Army for the Control of Cancer and thus every individual subscribing can be assured of a small part in this important work.

Mrs. Cameron Murdock, a young woman who has just returned from a year in Tahiti, discussed the effect of the present war upon the island, at our April meeting.

MARGARET S. DAVENPORT.

**Jackson County**

The regular monthly meeting of the Medical Auxiliary to the Jackson County Medical Society was held at the Hayes Hotel, March 18th at 6:30 p. m. After a short business meeting Mrs. W. A. Wickham gave a very interesting report on the work now being carried on by the Project Committee. At the present time the Committee is helping an eight-year-old boy from a broken home, who is in need of medical aid.

The committee in charge of this meeting were Mesdames Don Kudner, W. R. Finton, Ray Newton, W. A. Wickham, Phil. Riley, J. C. Scott and C. A. Leonard.

After the meeting the thirty members and guests adjourned to the High School as guests of the Woman's Club to hear Henry C. Wolfe, foreign correspondent and lecturer.

**Kent County**

The regular monthly meeting of the Woman's Auxiliary to the Kent County Medical Society was held March 12 in the Public Museum Auditorium.

Following the business session, Mrs. Fred C. Brace, gave a most interesting discussion and reading of four of Eugene O'Neill's one-act plays which were used in the motion picture "The Long Voyage Home."

On April 3 the Auxiliary, in conjunction with the League for the Control of Cancer, sponsored a free open meeting in the Museum Auditorium. An instruc-

# Detroit Clinic and Alumni Reunion

*of*

*Alumni Association of Wayne University College of Medicine*

## Wednesday, June 11, 1941

9:00 A.M.—Registration.

**Morning Lectures—Detroit Institute of Arts**
**Woodward at Kirby**

Business Meeting.

12:15 P.M.—Buffet Luncheon, Wayne County Medical Society.

**Afternoon Lectures—Detroit Institute of Arts**

5:30 P.M.—Cocktail Hour—on your own.

7:00 P.M.—Annual Banquet and Class Reunions—Hotel Statler
Malcolm Bingay—Toastmaster—Entertainment.
Speaker: Wallace R. Deuel
*Ace Foreign Correspondent, Chicago Daily News*
N. B. Ladies are invited to the Banquet.

## FURTHER DETAILS WILL BE FURNISHED BY MAIL



*Say you saw it in the Journal of the Michigan State Medical Society*

tive film was shown and Dr. O. H. Gillett gave a talk on "Cancer Control."

Our next meeting is our Annual Tea, which is always a highlight of the year. Mrs. Reuben Maurits is extending the hospitality of her home for the event, and Mrs. David B. Davis is planning the musical program.

ELIZABETH VAN BREE.

**Monroe County**

The Auxiliary to the Monroe County Medical Society met at the home of Mrs. M. A. Hunter, on February 18 at which twelve members were present. After a short business meeting refreshments were served and the members sewed for the Red Cross.

The Auxiliary met at the home of Mrs. H. W. Landon for its March meeting and had as guest speaker, Mrs. J. L. Wierengo of Grand Rapids, who spoke on cancer control.

There were twelve members present and after refreshments were served they sewed for the Red Cross.

GENEVIEVE A. REISEG.

**Saginaw County**

Tschaikowsky's Fifth Symphony was the topic of discussion at the Saginaw County Medical Auxiliary's monthly meeting on Tuesday evening, March 18, at the home of Mrs. Fred. J. Cady, Saginaw. Mrs. Rockwell M. Kempton, program chairman, presented Mrs. Charles C. Coulter, who read a paper on the life of Tschaikowsky; and Miss Leona A. Rohde, who analyzed the Symphony. Mrs. Coulter and Miss Rohde are active members of the Tuesday Musicale.

Refreshments were served after the meeting at an attractive table decorated with white spring flowers and white tapers. Mrs. W. J. O'Reilly and Mrs. J. W. Hutchison poured.

Mrs. D. C. Durman was in charge of the social hour assisted by Mrs. Eugene A. Hand, Mrs. H. J. Richter, Mrs. H. M. Bishop, Mrs. H. B. Kleekamp, Mrs. J. P. Markey and Mrs. H. E. Mayne, all of Saginaw, and Mrs. F. W. Ostrander, of Freeland.

**Shiawassee County**

The Woman's Auxiliary to the Shiawassee County Medical Society was organized September 19, 1940, with the able assistance of Mrs. L. G. Christian, State Legislation Chairman. The club is active and the meetings well attended. They sponsored one lecture given by Dr. L. F. Foster on "New Conceptions of Health Insurance," January 9, in the Woman's Club and W. J. Burns, executive secretary of the State Medical Society, gave a very interesting talk on State Legislation March 25.

CORA WATTS.

**Wayne County**

The March meeting of the Woman's Auxiliary to the Wayne County Medical Society was held on Friday, March 14, at the Society's headquarters.

Dr. J. Milton Robb introduced the speaker of the day, Mr. John M. Pratt, Executive Administrator of the National Physicians Committee for the Extension of Medical Service.

Mr. Pratt spoke on "Medical Legislation." He discussed the tremendous advancement of medicine in the last century and emphasized the fact it was made possible by the underlying principle of freedom in this country. He pointed out that the United States has the highest standards of health and the lowest death rate which the world has ever known, and he urged the continued operation of a system which had made such progress possible.

Following the address, Mrs. Buesser, president of the Auxiliary, appointed a Committee to study Mr. Pratt's message, consider suggestions and formulate a program for future action.

Tea was served at the conclusion of the meeting.

MARGARET J. WALLACE.


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# In Memoriam

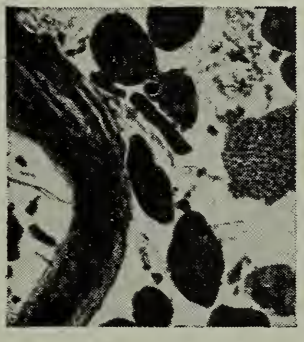
**LaMotte F. Bates** of Durand was born August 19, 1901 in Durand, and was graduated from the Durand High School June 1918.

He entered the University of Michigan and was graduated from the University of Michigan Medical School in 1924. He served his internship in Detroit, in the Durand Hospital and in Memorial Hospital, then entered active practice with his uncle, the late R. C. Fair, M.D. During the years that followed Doctor Bates built a large practice and became one of the leading physicians of Shiawassee County. For some years he had been surgeon of the Grand Trunk railroad. Doctor Bates served as president of Shiawassee County Medical Society in 1940. He died as the result of a fall, April 5, 1941.

**George Clinton Hafford,** of Albion was born July 10, 1862, in Pierpont Manor, New York and was graduated from the University of Michigan Medical School, June 30, 1887. After a year of practice in Carleton, Michigan, he went to Manistique for ten years' service. In 1899 Doctor Hafford returned to lower Michigan and located in Albion, which had been his home until the time of his death. For the last twenty-three years his associate has been his son, Alpheus T. Hafford, M.D. Doctor Hafford gained the rank of major in the World War while serving as surgeon in the Medical Corps at Fort Benjamin Harrison, Indiana, Camp Taylor, La., and as chief surgeon in a 3,000 bed hospital in Fort McHenry, Md. He was elected Emeritus Member of the Michigan State Medical Society in 1938 and an Affiliate Member to the American Medical Association in 1939. Doctor Hafford was active in the Michigan State Medical Society, serving as Councilor of the Third District for six years. He was also interested in the activities of the American Legion and many civic organizations. He died April 19, 1941, in St. Petersburg, Florida.

**James J. Haviland** of Owosso was born near Gaines, Michigan on March 25, 1869, attended and graduated from Gaines High School, and then entered the Detroit College of Medicine, receiving his degree in medicine in 1894. The following year he started practicing in Lennon. Later he took postgraduate courses at the University of Michigan, and in New York, then resumed his Lennon practice in 1899. Still later he spent six months at the Royal Hospital, London, England. In 1910 Doctor Haviland came to Owosso and practiced there until his death, with the exception of the time spent in the army during the World War. He enlisted in 1917 in the Medical Corps of the 329th Field Artillery of the 85th Division, and in June 1918, went overseas until March 1919, when he returned and was honorably discharged at Camp Grant, with the rank of major. A short time later he was commissioned a colonel in the reserve corps and placed on the inactive list. Doctor Haviland died March 25, 1941.

**Charles H. Heffron** of Adrian was born in 1871 in Fulton county, Ohio. He attended Adrian high school and in 1893 completed a course in medicine at Western Reserve (Wooster) University. Later he took a postgraduate course at the University of Michigan. He began his career as a physician in Metamora, Ohio in 1893 and for a period of some 27 years practiced there. Doctor Heffron went to Adrian, Michigan in 1920, and established his practice which he continued until his death on March 22, 1941.



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**Albert G. Huegli** of Detroit was born September 4, 1878 in Detroit, Michigan and was graduated from the Detroit College of Medicine in 1901. Since graduation, he conducted a practice in Detroit. With the founding of Deaconess Hospital, Doctor Huegli became an interested and industrious member of the Medical Staff, serving for twenty-two years, until his death, as secretary of that organization. Besides his work on the Deaconess staff, Doctor Huegli was attending physician of the Evangelical Lutheran Institute for the Deaf. He was well known as a progressive internist. Doctor Huegli died March 7, 1941.

**Francis H. Husband** of Sault Ste. Marie was born in Welreby, Ontario, Canada, July 13, 1877 and was graduated from the University of Michigan School of Medicine in 1901. For a brief period after graduation he was in Port Huron, Michigan. Then he moved to Sault Ste. Marie in 1902, where he established his practice and remained, except for periods of postgraduate work in the east. Doctor Husband served as president of Chippewa County Medical Society in 1930. He died March 16, 1941.

**William A. Royer** of Battle Creek was born June 15, 1864 in LaGrange County, Indiana, and was graduated from LaGrange High School. After attending normal college in Wauseon, Ohio, he taught school for several years and then enrolled in the University of Michigan Medical School. He was graduated from the University in 1892. Doctor Royer practiced twenty-two years in Mendon, Michigan, one year in Fulton and three years in Sturgis and had maintained offices in Battle Creek for twenty-three years. He died March 30, 1941.

**George P. Sackrider** of Owosso, Michigan was born May 4, 1874 in Oakley, Michigan and was graduated from the Detroit College of Medicine. Following graduation, he served as an interne at Harper Hospital, Detroit, and in 1905 located in Henderson, Michigan where he practiced until 1912. He moved to Owosso in 1912 and continued the practice of general medicine and surgery. When the United States entered war in 1917 Doctor Sackrider gave up his practice and enlisted in Base Hospital Unit No. 36, the second outfit to go overseas. He spent twenty months in the army, being discharged with the rank of major. Returning to Owosso after the war, Doctor Sackrider in 1920 started specializing in treatment of the eye, ear, nose and throat and continued in that practice until his death. He died March 11, 1941.

**Cyril K. Valade** of Detroit was born in that city March 27, 1891, and was graduated from Central High School and the Wayne University College of Medicine in 1916. Doctor Valade volunteered his services in the English Army in the World War, and was at Graylingwell Hospital, and later transferred to Charing Cross Hospital, and also was stationed at St. Bartholomew's in London, England. He was transferred to the American Army after the United States entered the war and was stationed at Rochester Row Hospital. He was honorably discharged as a Captain of the United States Medical Corps. Dr. Valade was affiliated with various Veteran's Societies, and a Past Commander of the Business and Professional Men's Post, American Legion, and at the time of his death was Chairman of the Syphilis Control Committee of the Michigan Medical Society. He specialized in Dermatology and had published several books on the subject. He was a member of the staff of Receiving, St. Joseph's Mercy and Harper Hospitals. Doctor Valade died March 27, 1941.


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# COUNTY AND PERSONAL ACTIVITIES

**100 Per Cent Club for 1941**

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| Barry | Manistee |
| Clinton | Menominee |
| Dickinson-Iron | Muskegon |
| Eaton | Ontonagon |
| Huron | St. Clair |
| Ingham | Sanilac |
| Jackson | Tuscola |
| Lapeer | Wexford-Missaukee |
| Lenawee | |

The above county medical societies have certified the 1941 dues of 100 per cent of their membership.

*Eleven county societies* are not in "The 100 per cent club" because of *only one delinquent member!* Eighteen other county societies have less than five delinquent members.

*Warren E. Wheeler, M. D.,* Field Representative in Pediatrics, addressed the Barry County Medical Society at its meeting of April 10th in Hastings.

* * *

*W. H. Huron, M. D.,* Iron Mountain, addressed the Woman's Auxiliary to the Marquette-Alger County Medical Society at its meeting of April 2nd.

* * *

*Councilor Ray S. Morrish, M. D.,* Flint, attended the National Convention of the American Red Cross in Washington the week of April 21st.

*Members of the Public Health* and Venereal Control Committee of Macomb County Medical Society are W. J. Kane, M. D., E. J. Dudzinski, M. D., and R. E. Lynch, M. D.

* * *

*Frank Stiles, M. D.,* Lansing, addressed the Ionia-Montcalm County Medical Society at Portland on May 13 on the subject of "Skin Diseases and Treatment of Same," illustrated by lantern slides.

* * *

*The American Association for the Study of Goiter* held its 1941 meeting at the Hotel Statler, Boston, on May 12-14. The program for the three-day meeting consisted of papers dealing with goiter and other diseases of the thyroid gland, dry clinics and demonstrations.

* * *

*A one-day conference* some time in June on Student Health Practice is being arranged for physicians and others interested in this work. Address inquiries concerning plans for the conference to Dr. Claire E. Healey, University Health Service, University of Michigan, Ann Arbor, Michigan.

* * *

*Frank H. Power, M. D.,* Ann Arbor, formerly field representative in Cancer for the Michigan State Medical Society has been called for active service with the Army and is now stationed at Fort Jackson, South Carolina. As yet, no successor has been appointed in place of Doctor Power.


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*New address.* Captain L. A. Potter, Inspector for the State Health Department, reports that George Saxton, a layman, formerly of Allegan, was sentenced on April 1st to two to four years in Jackson Prison for performing illegal abortions. Mr. Saxton was also fined $500 in Circuit Court by Judge Fred T. Miles.

* * *

*Arthur R. Woodburne, M. D.,* Grand Rapids, has been appointed Chairman of the M. S. M. S. Syphilis Control Committee by President P. R. Urmston to fill the vacancy due to the death of C. K. Valade, M. D. Doctor Urmston also appointed Eugene Hand, M. D., of Saginaw to the Syphilis Control Committee.

* * *

*L. Fernald Foster, M. D., Bay City; Roy Herbert Holmes, M. D., Muskegon; T. E. Hoffman, M. D., Vassar; Hewitt Smith, M. D. and Harold A. Miller, M. D., Lansing,* addressed a meeting of the Kent County Medical Society in Grand Rapids on April 17th. "Medical Care of Welfare Clients" was the subject of The Symposium.

* * *

*The Kalamazoo Academy of Medicine* has entered into a contract with the Kalamazoo County Social Welfare Board to provide home and office medical care to those on welfare in Kalamazoo County, to be effective as of June 1, 1941. The Kalamazoo Social Welfare Board also executed a separate contract to provide hospitalization for welfare cases.

* * *

*Bowlers attention!* Plans are on foot to have a bowling tournament during the 1941 session of the American Medical Association in Cleveland the week of June 2nd. It is hoped that teams can be formed representing various states. Physicians interested in bowling please write Lewis W. Bremerman, M. D., 1709 West 8th Street, Los Angeles, California.

* * *

*"Electric Arc Welding*: The Effects of Welding Gases and Fumes" appeared in the issue of April 12, 1941, written by Stuart P. Meek, M. D., Carey P. McCord, M. D., and Gordon C. Harrold, Ph.D., all of Detroit.

"Mass Testing of Color Vision" by Erich Sachs, M. D., Detroit, appeared in the issue of April 19th.

* * *

*The 43rd Annual Meeting* of the Medical Library Association will be held at the University of Michigan Medical School, Ann Arbor, on May 29-31, 1941, under the presidency of Col. Harold W. Jones, of the Army Medical Library, Washington, D. C. The program will include papers on the Coöperation of Libraries, Union Catalogs, Medical History and Industrial Medicine.

* * *

*Volunteers* are needed for the Royal Army Medical Corps and Emergency Medical Service. According to the American Red Cross at least 1,000 young American doctors of medicine are needed in Britain to help care for the civilian population as well as service with the Royal Army Medical Corps. Applicants must be citizens of the United States, unmarried or without dependents, and no more than forty years of age for service with the RAMC, and no more than forty-five years old for appointment to the Emergency Medical Service. For full information as to qualifications and other details, write the American Red Cross National Headquarters, Washington, D. C.



*Say you saw it in the Journal of the Michigan State Medical Society*

*Recent articles* written by members of the Michigan State Medical Society and published in *The Journal of the American Medical Association* include the following:

"Diseases of the Respiratory Tract and Air Conditioning" by Carey P. McCord, M. D., Detroit, issue of March 29. "Diagnosis of Injuries of the Hand" by J. M. Winfield, M. D., Detroit, appeared in the same issue.

* * *

*Civil Service* applications are being received for senior medical officers at $4,600 per year; medical officers at $3,800; and associate medical officers at $3,200. These appointments are available in the Public Health Service, Food and Drug Administration, Veterans' Administration, Civil Aeronautics Administration, and Indian Service. Applications should be filed with the United States Civil Service Commission, Washington, D. C., as early as possible.

* * *

*Physicians are urged* to refrain from collecting pharmaceutical samples for shipment to British Relief. It is pointed out that while we may all be in sympathy with the "Bundles for Britain" movement, this particular practice is very expensive and the value to the British is questionable due to the heterogenous material which reaches the British Relief. In addition, most all of the pharmaceutical manufacturers have individually donated large supplies of vitamin capsules and other needed pharmaceutical products to the British Relief at no charge.

* * *

*Doctor, remember* your particular friends, the exhibitors, at your annual convention, when you have need of equipment, appliances, medical supplies and service. Here are ten more of the firms which helped make the 1940 convention such a success:

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R. B. Davis Company, Hoboken, New Jersey.
Cottrell-Clarke, Inc., Detroit.
The Coca-Cola Company, Atlanta, Georgia.
S. H. Camp & Company, Jackson.
Cameron Surgical Specialty Company, Chicago.

* * *

*The Oakland County Medical Society* were guests of Mr. Harry J. Klingler, General Manager of Pontiac Motor Division, on May 14 when they visited the new Pontiac Plant Hospital. Members of the Society were shown through the completely new hospital by Ethan B. Cudney, M. D., Pontiac's medical director. Guest of honor at the hospital and plant tour and dinner were C. D. Selby, M. D., medical consultant for General Motors Corporation. Following the dinner in the plant restaurant, Kenneth E. Markuson, M. D., Director of the Bureau of Industrial Hygiene of the Michigan Department of Health, spoke on "The Relationship of the Private Physician, the Industrial Physician and the Bureau of Industrial Hygiene to Industrial Health."

* * *

*The Michigan Association of Industrial Physicians and Surgeons* held its 1941 Annual Meeting in Detroit on April 16th. Among the distinguished speakers on the program were Edward C. Holmblad, M. D., Chicago; John Sundwall, M. D., Ann Arbor, J. Harold Couch, M. D., Toronto; Daniel J. Lynch, M. D., Boston; E. S. Gurdjian, M. D., Arthur E. Schiller, M. D., Wm. A. Lange, M. D., Frank A. Kelly, M. D., Wm. E. Blodgett, M. D., George P. Myers, M. D., E. Howard Hanna, M. D., Walter G. Paterson, M. D., Wm. Y. Kennedy, M. D., A. Willis Hudson, M. D., Earl G. Krieg, M. D., Earl F. Lutz, M. D., Charles H. Clifford, M. D., Clyde K. Hasley, M. D., Herbert H. Holman, M. D., John A. Hookey, M. D., Harold


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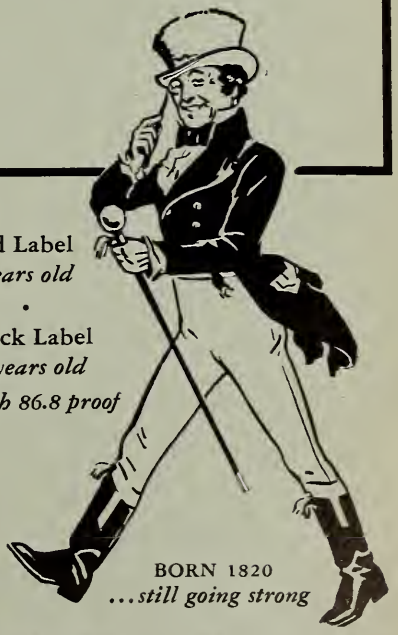


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* * *

*Mark Your Calendar Now!* September 17, 18, 19, are red letter days for you. Plan to attend the 1941 Grand Rapids Convention of the Michigan State Medical Society. Thirty outstanding leaders in scientific medical progress have accepted invitations to speak in Grand Rapids next September. The list will be published in the June JOURNAL. Don't miss this unparalleled opportunity to hear these national and international authorities discuss first-hand the problems which confront you every day in your practice.

Opportunity will be given for round table discussion led by these men at 3:30 each afternoon.

Spend September 17, 18, 19, 1941, in Grand Rapids. And bring your wife. She will enjoy the activities and entertainment arranged by the Woman's Auxiliary. It's not too soon to write for hotel reservations!

* * *

*In March and April* of this year the Macomb County Medical Society undertook the immunization of all the school children of the county against diphtheria and smallpox. Two doses of toxoid, a month apart, were given all applicants up to and including the age of ten, after which all who applied were vaccinated. Hitherto the urban population had been protected yearly, but this was the first attempt at rural immunization and the response obtained proved the urgent need.

Thirty-five physicians donated their time to this cause and St. Joseph Hospital of Mt. Clemens gave the services of thirty student nurses to aid at the clinics. Twenty-one centers were established in schools throughout the county and the children from the surrounding districts were transported thereto. Twenty-five cents per treatment was the fee for those who could afford it. All others were treated free. The fees were collected by the local teachers and the individual schools were allowed to keep them to spend in any manner they saw fit. Between 7,500 and 8,000 treatments were administered and the Society plans to make this an annual program.

* * *

### Alumni Clinic and Reunion

The Annual Clinic and Reunion of the Alumni Association of Wayne University College of Medicine will be held Wednesday, June 11, 1941, 10:00 to 5:00 P. M., Detroit Institute of Arts, Woodward at Kirby, Detroit. Speakers will be:

Wm. Magner, M.D., D.P.H., Professor of Pathology, University of Toronto: "The Pathogenesis of Anemia."

Phillip Dudley Woodbridge, M.D., New Haven, Connecticut, formerly of Lahey Clinic: "Recent Developments in Anesthesia."

Frank D. Dickson, M.D., Kansas City: "The Surgical Treatment of Arthritis."

Charles W. Mayo, M.D., Mayo Clinic: "Malignancy of the Lower Colon and Rectum, Surgical Treatment."

Walter L. Palmer, M.D., Department of Internal Medicine, University of Chicago: "Diagnosis and Treatment of Gastric Disease."

Wallace R. Deuel, ace foreign correspondent of the *Chicago Daily News,* will be guest speaker at the Banquet. His subject will be "World Counter-revolution."

The Executive Committee of the Association is composed of the following:

W. W. McGregor, M.D., President; C. E. Umphrey, M.D., President-Elect; Volney Butler, M.D., Secretary; C. H. Eisman, M.D., Treasurer; Harold Kullman, M.D., Harold Sawyer, M.D., L. P. Pratt, M.D., Louis J. Bailey, M.D., N. W. Woodry, M.D., P. L. Ledwidge, M.D.

*Bruce H. Douglas, M. D.,* took over his new duties as Health Commissioner of Detroit on April 15, succeeding Henry F. Vaughan, Dr. P. H., recently appointed head of the new school of Public Health at the University of Michigan. Doctor Douglas is prominent in the field of tuberculosis, having made a number of surveys on tuberculosis problems. He is on

Commissioner Douglas

the teaching staff of the University of Michigan and Wayne University and is a member of the National Research Council Committee on Tuberculosis. He is a past president of the American Sanatorium Association, the Mississippi Valley Conference on Tuberculosis, the Michigan Trudeau Society and the Michigan Tuberculosis Society. At the same time, the Detroit Board of Health announced the appointment of Joseph G. Molner, M. D., as Deputy Health Commissioner and Medical Director; and Garner M. Byington, M. D., Dr. P. H., as Director of Child Welfare and School Health Service.

* * *

*The MSMS Radio Committee* advises that the following Health Talks were broadcast over radio station CKLW:

Saturday, March 1—"Feeding the New Baby" by Wilfred S. Nolting, M. D., Detroit.

Saturday, March 8—"Appendicitiis" by Clifford D. Benson, M. D., Detroit.

Saturday, March 15—"Can Cancer Be Cured" by Harry Nelson, M. D., Detroit.

Saturday, March 22—"The Value of Anesthesia in Surgery and Medicine" by Norman Bittrick, M. D., Detroit.

Saturday, March 29—"Problems in Obesity" by Richard Connelly, M. D., Detroit.

Saturday, April 5—"Anemia" by Neil J. Whalen, M. D., Detroit.

Saturday, April 12—"Acute Abdominal Pain" by Gaylord S. Bates, M. D., Detroit.

Saturday, April 19—"Misconceptions About Heart Disease" by Ralph A. Johnson, M. D., Detroit.

This will conclude the radio talks sponsored by the Michigan State Medical Society for the year 1940-41.

* * *

**Golfing Association Tournament**

The American Medical Golfing Association's Twenty-Seventh Annual Tournament will be held at Cleveland Country Club-Pepper Pike Club, Cleveland, Ohio, Monday, June 2, 1941. Two famous championship courses and a beautiful clubhouse await the nation's medical golfers in Cleveland on the occasion of the A.M.A. Convention.

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The sixty prizes, in the nine Events, will be distributed after the banquet at the Cleveland Country Clubhouse at 7:00 p. m.

Officers of the A.M.G.A. for 1941 are D. H. Houston, M. D., Seattle, president; Harry E. Hock, M. D., Chicago, and James Craig Joyner, M. D., New York City, vice presidents; Bill Burns, secretary.

The Cleveland Golf Committee is composed of John B. Morgan, M. D., Chairman, 1822 Republic Building; William J. Engel, M. D., Farrell T. Gallagher, M. D., and F. W. Merica, M. D.

All members of the A.M.A. are eligible for Fellowship in the A.M.G.A. Write the Secretary, 2020 Olds Tower, Lansing, Michigan, for registration application.

* * *

*The Placement Bureau* of the Michigan State Medical Society is eager to learn of the names of physicians who are interested in finding locations in which to practice. Every effort is being made by the Placement Bureau to find locum tenens for physicians who are called to milintary service. Physicians who are interested in finding a locum tenens while they are away in the Army or physicians who are looking for a place in which to practice, are urged to write the Placement Bureau, c/o 2020 Olds Tower, Lansing, Michigan.

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WANTED—A physician with Michigan license to do general practice during month of June and definite period thereafter. Arrangements for personal interview necessary. Salary $350.00 per month. Box 10, Michigan State Medical Society, 2020 Olds Tower, Lansing, Michigan.

# THE DOCTOR'S LIBRARY

*Acknowledgement of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

HEMORRHAGIC DISEASES. Photo-Electric Study of Blood Coagulability. By Kaare K. Nygaard, M.D., Former Fellow in Surgery, the Mayo Foundation; Former Assistant Surgeon, the University Clinic, Oslo; Fellow of the Alexander Malthe Foundation for Research in Medicine, Surgery and Gynecology. Illustrated. St. Louis: The C. V. Mosby Company, 1941. Price: $5.50.

Nygaard has added, in this beautiful monograph, a great deal to the study of blood coagulability. This work has been done through the new photelgraph which automatically records such progressive processes as the coagulability of the blood and other phenomena. The determinations are visualized by photelgraphic tracings called coagelgrams. The classical conception of the process of coagulation is that the two phases; first, the formation of thrombin, and second, the transition of fibrinogen into fibrin has been modified through this work since it was determined that these two processes were telescoped one into the other chronologically. Also, it was determined that the velocity of the process of blood coagulation is a relative expression of the velocity of thrombin formation. These and other findings are applied clinically to the various diseases in which the coagulation of the blood is of primary consequence. Such conditions as hemophilia, thrombocytopenic purpura, the action of vitamin K, diseases of the gallbladder, bile ducts, pancreas and liver, hemorrhagic disease of the new-born are all discussed in relation to these findings. That this work was done at the Mayo Clinic reflects greatly to the honor of that group.

* * *

A DIABETIC MANUAL for the Mutual Use of Doctor and Patient. By Elliott P. Joslin, M.D., Sc.D., Clinical Professor of Medicine Emeritus, Harvard Medical School; Medical Director, George F. Baker Clinic at the New England Deaconess Hospital; Consulting Physician, Boston City Hospital, Boston, Mass. Seventh Edition, thoroughly revised. Illustrated. Philadelphia: Lea and Febiger, 1941. Price: $2.00.

The old master of diabetes presents his seventh edition of this valuable adjunct to the care of the diabetic. It is very readable and, of course, scientifically sound. There is a large question and answer division which answers most of the questions which are asked by the patient. The optimism of the book is commendable. This is a perfectly safe and instructive book for the use of any diabetic.

* * *

TEXTBOOK FOR MALE PRACTICAL NURSES. By Gayle Coltman, R.N. New York: The MacMillan Company, 1941. Price: $2.00.

This is a very detailed description of how to care for the sick patient in the hospital by one not having technical training. The material in it seems applicable to both male and female practical nurses and could be studied by all these advantageously.


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THE MASK OF SANITY. An Attempt to Reinterpret the So-called Psychopathic Personality. By Hervey Cleckley, B.S., B.A. (Oxon.), M.D., Professor of Neuropsychiatry, University of Georgia School of Medicine, Augusta, Georgia. St. Louis: The C. V. Mosby Company, 1941. Price: $3.00.

The so-called psychopathic personality has always been a headache to the family physician and a heartache to the family and friends of the patient. In this volume a number of cases are interestingly reported and the viewpoint of the hospital and police authorities is emphasized. The purpose is to better define and interpret this condition and stimulate some coördination between medical and legal authorities in handling these unfortunates. This group cannot be confined in the mental hospitals because they are sane and they cannot be cared for in the penal institutions because of their irresponsibilities. The general practitioner who reads this book will have a better understanding of these cases.

* * *

MANUAL OF CLINICAL CHEMISTRY. By Miriam Reiner, M.Sc., Assistant Chemist to the Mount Sinai Hospital, New York. Introduction by Harry Sobotka, Ph.D., Chemist to the Mount Sinai Hospital, New York. With 18 illustrations. New York: Interscience Publishers, Inc., 1941. Price: $3.00.

A compact pocket-sized edition which does very well in covering practical biochemistry. It is a com-


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pilation of the methods used at Mount Sinai Hospital in New York. It is very practical, giving in detail the procedures and techniques. The determination of vitamin concentration has been added. The usual toxicological tests, hormone and various function tests are described. This is an indispensible book for the hospital or physician's laboratory.

* * *

TECHNIQUES OF CONCEPTION CONTROL. By Robert Latou Dickinson, M.D., Former President, American Gynecological Society; and Woodbridge Edwards Morris, M.D., General Medical Director, Birth Control Federation of America. A practical manual issued by the Birth Control Federation of America, Inc. With fifty illustrations. Baltimore: The Williams and Wilkins Company, 1941. Price: $.50.

This is a paper pamphlet in which is described, with the utmost detail, the theory, principles, use, abuse, and efficiency of the common types of appliances and practices in use. Numerous diagrams and drawings make the text very clear and helpful.

* * *

THE THERAPY OF NEUROSES AND PSYCHOSES. A Socio-Psycho-Biologic Analysis and Resynthesis. By Samuel Henry Kraines, M.D., Associate in Psychiatry, University of Illinois, College of Medicine; Assistant State Alienist, State of Illinois; Diplomate of American Board of Psychiatry and Neurology. Philadelphia: Lea and Febiger, 1941. Price: $5.50.

The publisher states that "This work has been written to aid the physician, who has not specialized in psychiatry, in dealing with the psychoneurotic patients. It covers the principles of treatment the practicality of which is demonstrated * * *." Many invaluable suggestions are given to the physician as to the conduct of treatment for his psychoneurotic patient. It is interestingly and practically written. The arrangement of chapter headings is especially designed for the general practitioner who seeks assistance rather than for the psychiatrist. It is recommended to every general practitioner.

* * *

MODERN DRUGS IN GENERAL PRACTICE. By Ethel Browning, M.D., Ch.B. A William Wood Book. Baltimore: The Williams & Wilkins Company, 1940. Price: $3.00.

This is by an English author and was printed in England. The book presents some viewpoints on the action of drugs which are not commonly accepted in this country and there are also some drugs discussed which should be given more general use in the United States. For the therapeutist this book should offer numerous valuable suggestions and certainly additional information.

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# READING NOTICES

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Most recent addition to the Lederle line of ethical pharmaceuticals and biologicals is Cerevim, an advanced cereal formula for babies and infants, formerly distributed by the Cerevim Products Corporation.

In announcing the addition of this established product to their line, Lederle Laboratories emphasize that they will continue to follow their own policy of detailing physicians and selling through retail druggists only —which is the same basis on which substantial sales for Cerevim have been established already.

Cerevim is Council-Accepted and has the full endorsement of the Council on Foods of the American Medical Association. Cerevim is a mixture of natural foods scientifically blended, and provides an excellent natural source of Vitamin B Complex factors and Iron. The Calcium and Phosphorous are derived primarily from milk. The formula was developed on the basis of five years' research at leading Eastern Universities and clinics which preceded the product's introduction in 1937.

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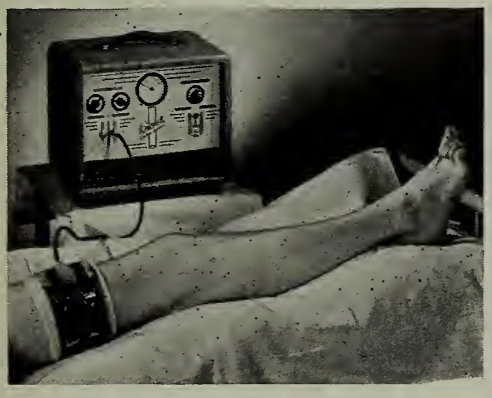

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Michigan Medical Service is issuing a new Identification Card which will permit a more ready determination of whether the subscriber is enrolled in the Surgical Benefit Plan or the Medical Service Plan. The new Cards carry the statement "This Card must be shown to your doctor when you request services." A similar statement is in the subscriber's certificate and is also emphasized at the time of presentation. Subscribers should, therefore, present their Identification Cards when they request services. However, it would be helpful if the doctor or the doctor's secretary would ask the patient whether or not he is a subscriber to Michigan Medical Service.

### Payments for April

The Executive Committee of Michigan Medical Service reports that during the first months of this year the expected seasonal increase in services was considerably emphasized by somewhat of an epidemic of influenza and measles. In addition, there has been a substantial increase in enrollment during the past six months, with the usual resultant demand for services during the first months that the certificate is in force.

In view of this situation and in the interests of conservative management, the Executive Committee has authorized payment for services rendered during the month of April on a basis somewhat lower than that applied during the past thirteen months.

An analysis of Monthly Service Reports indicates quite clearly that approximately 40 per cent of the services rendered would not have been obtained if the subscriber had to pay the doctor directly. This means more patients for the doctors and more adequate medical service for the subscribers.

### Reporting

The last Bulletin explained that the Executive Committee felt that Monthly Service Reports should not be authorized for payment if received 90 days or more after the service has been rendered. It is requested that all reports for services to subscribers be mailed promptly.

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### Registration of Physicians

There has been a very encouraging increase in the registration of physicians. More than 3,485 doctors of medicine—approximately 80 per cent of the total possible number—are participating and are ready to render services for subscribers. This splendid coöperation, which has made possible the operation of the prepayment medical service plan, has gained nation-wide recognition for Michigan doctors.

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*Archives of Pediatrics—56:Nov., 1939
Medical Record—Aug. 21, 1940

# ✶ HALF A CENTURY AGO ✶

## Annual Address on Practice of Medicine

### PHTHISIS*

HENEAGE GIBBES, M.D.
Ann Arbor, Michigan

Pulmonary consumption has existed among men as far back as we have any historical record of disease. It is credited by Hirsch with about two-sevenths of all deaths, and lately has excited so much interest in the profession that I need offer no apology for making it the subject of my address.

I use the term "pulmonary consumption" to include those cases where progressive wasting of the body is associated with consolidation and the formation of cavities in the lungs.

In the earliest account of this disease we find it described as a suppuration of the lungs. Later on, we find an account of large and small tubercles associated with suppuration and ulceration.

The word tubercle was first used to denote any small swelling or node, and as far back as 1700 we find Mangetus comparing the tubercles found in the lungs, liver, and spleen with millet seeds.

We find various descriptions of this disease after this, and controversies arising as to whether all consolidations in the lungs were formed of tubercles. Two forms of tubercle were spoken of, the miliary and tuberculous infiltration, and we come to the time of Niemeyer, who considered that a large majority of cases of phthisis were inflammatory. This view was widely held until a comparatively recent period and is still supported by high authorities.

At the beginning of the year 1882, the majority of clinicians of any standing firmly believed in the duality of phthisis.

In April of that year came the announcement that Dr. Robert Koch had discovered the bacillus of tuberculosis, and that inoculation with this organism invariably reproduced the disease in susceptible animals. Everyone at once set to work examining sputum and recording the results of their observations. Watson Cheyne was sent by the Association for the Advancement of Scientific Research to Berlin to examine Koch's work, and, if possible, corroborate it. This he did by going to Koch's laboratory, obtaining material from him and working by his methods, and getting results which he published in the "Practitioner" for April, 1883, and in which article he demonstrated by illustrations and descriptions that he did not know the difference between a parasitic worm and a striped muscle fibre. And this man's work is held, in the last editions of the English textbooks on pathology, to be the corroboration of Dr. Koch's results.

The accepted position at the present time with a large majority of practitioners in this country is, that wherever the bacillus tuberculosis is found there is tuberculosis, and it is this position which I propose to discuss in this address.

We are told that the tubercle bacillus is the virus of tuberculosis, and we, therefore, ought to be fully aware of the conditions under which it exists in disease, so that we may have some rational idea as to the treatment we should adopt in these cases.

Now comes the question, if we are going to investigate this disease, what morbid conditions shall we take as the basis on which to commence? Naturally, we should say, those in which cavities exist in the lungs, but we find that tubercle bacilli are found in cases where there are no cavities; we must, therefore, extend our basis and take in consolidations. Now we find these existing in a number of different conditions—in the old fashioned pulmonary phthisis, in chronic tuberculosis, in acute miliary tuberculosis, in acute pneumonia, in the lesions of syphilis and in hydatid disease, also in cancer and sarcoma. All these cause consolidation; but to simplify matters we will leave out all but pulmonary phthisis, chronic tuberculosis and acute miliary tuberculosis. These three diseases are characterized by the formation of consolidations in the lungs, and in all of them tubercle bacilli are found. Therefore, with the prevailing view, these are all tuberculosis, and are all caused by the action of the tubercle bacillus of Koch.

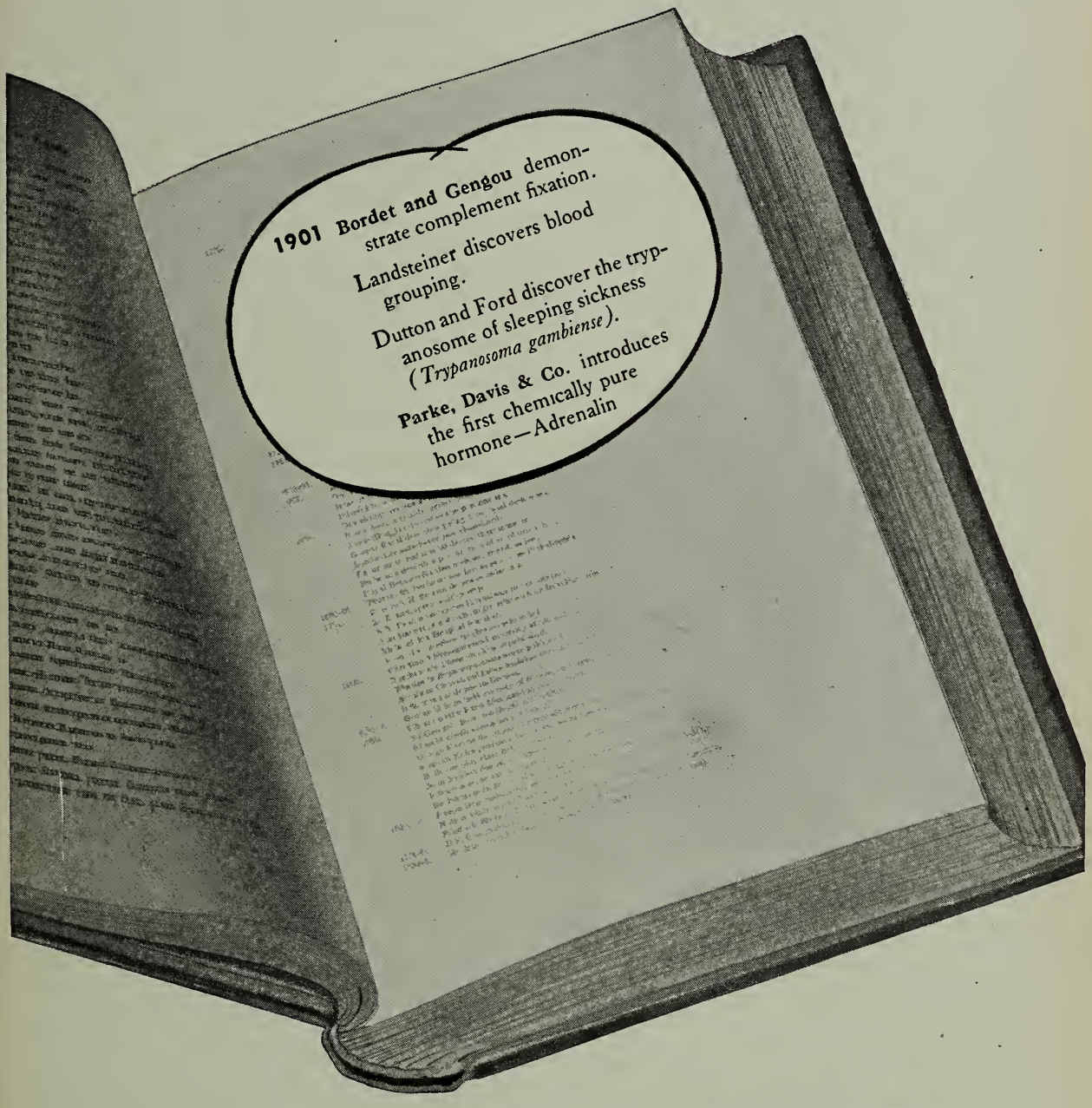
To commence with pulmonary phthisis; as I understand it, this is a common result in a case of catarrhal or broncho-pneumonia either in a weakly patient or where the disease is of unusual severity, and is brought about most commonly in one of two ways. We will take for an example a delicate girl getting her feet wet and catching a cold; this passes into bronchitis and the inflammatory process extending, involves the small bronchioles; the case then becomes one of capillary bronchitis. When this stage is arrived at, two courses may be taken by the disease: the inflammation may pass on from the bronchioles into the lung substance and develop into a case of catarrhal or broncho-pneumonia, or the products of inflammation may block up one or more of the small bronchioles by forming a plug in them, which is drawn further in and more firmly fixed at each inspiratory effort, the result being that no more air can enter those lobules of the lung supplied by the plugged bronchioles. When this has taken place, the air imprisoned in these lobules soon becomes absorbed and they pass into a state of collapse. Now in any form of collapse of the lung the greatest danger arises from the almost inevitable inflammatory action, which is at once set up in the air vesicles in this collapsed condition.

We have then, in these cases,, a position of the lung consolidated, either by direct extension of the inflammatory action from the bronchioles, or by inflammatory action set up by the collapsed condition, which is directly brought about by the inflammation in the bronchioles. Now, supposing that this delicate girl has not sufficient vitality to throw off this inflammatory process in her lungs, but that it is allowed to go on until the acuteness of the inflammation has destroyed the affected part and it has become devitalized.

We have then one or more portions of the lung in a necrosed condition; this dead tissue undergoes a further disintegration and becomes softened and caseated, and this softened mass is expectorated through the bronchiole connected with it, leaving behind a cavity. This is an inflammatory process from the beginning to the end, and we are all aware how often the

*Presented at the Twenty-sixth Annual Meeting of the Michigan State Medical Society, at Saginaw in June 1891.

*These names, these years*
*have helped make modern medical history*

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whole of this process takes place with great rapidity, and the wet feet result in the death of the patient. I do not think there is anything strained in this example, but that something of the kind must be familiar to you all. We will now inquire into the part played by the tubercle bacilli in this case, for it is in these cases that we find them in enormous numbers, large, long, and full of the so-called spores. We find the sputum loaded with them as soon as the consolidation begins to break down, and we find them in the bronchioles of cases of capillary bronchitis, dying in that condition. Now, where do they come in, in these cases: as the virus or causation of the disease? We will now take chronic pulmonary tuberculosis; this is a condition with a totally different history. We have here a disease of insidious origin, with gradually iuncreasing weakness, anemia, nocturnal cough and irregular fever, and physical signs, at first very obscure, at one apex, gradually increasing until marked consolidation is found, which then breaks down and ends in the formation of a cavity. In the meantime, the disease is steadily progressing in this lung and a similar change is set up in the apex of the other organ. In the early stage, before there is any destruction of lung tissue, we do not get tubercle bacilli in the sputum, but when the formation of a cavity begins we then find them. Their number varies, however, enormously, and in some few cases they are never found in the sputum during life, or in the lungs after death, although these are full of cavities.

Tuberculosis is a much more formidable disease. It commences insidiously and is often far advanced before its presence can be detected. Consisting, as it does, of a new growth of fibroid tissue derived from the connective tissue of the lungs, it is evident that a good deal of this new tissue may be formed before it can be detected by physical examination. It generally commences in the apex of the lungs and grows downwards. It has this peculiarity, that after growing to a certain size, which varies according to the chronicity of the process, the center undergoes a necrotic change and loses its vitality. Although one of these tubercular masses looks large to the naked eye and appears to be homogeneous, it is in reality made up of an aggregation of tubercles, and this tubercular process is always progressing on the outside, while the center is breaking down. Little tubercles in the earliest stage can be found in the periphery. These tubercles can grow rapidly, as is shown in acute miliary tuberculosis, where the lungs are found filled from apex to base with them, in all stages, but of small dimensions, also in tubercle of the choroid, where the growth is the same. Whatever the cause may be of this condition, it is something which must be carried throughout the lungs by the circulation in acute miliary tuberculosis, but which must have some other distribution in those more chronic forms where the apex is the first part affected. Dr. Shurly and I have now been working together on this subject for three years, and we have gone most carefully into all the conditions found. Our investigations have resulted in the differentiation I have just stated, and also in causing us to consider the tubercle bacillus more as an accessory than an actual factor in the production of tuberculosis. My own view, that there was some morbid product responsible for the irritation resulting in the new growth tubercle, was formed before I came to this country, and on my arrival here I was glad to find Dr. Shurly, from work he had been doing in this direction, was also of the same opinion. We procured monkeys and carefully studied the disease processes in them, and having satisfied ourselves that we had a morbid chemical substance to deal with, we set to work to try to neutralize it. After numberless trials, we found that we could do this with iodoform, but that substance set up a fatty change in the liver and had to be discarded. We afterwards found that iodine would prevent the formation of tubercle in inoculated animals, and that chloride of gold and sodium would render tubercle bacilli innocuous, without, however, killing them. This seemed to be the result we were aiming at, as we always considered that the so-called pure cultures of tubercle bacilli, were not really pure, but as in the case of the Jequirity bacillus, contained some morbid product introduced from the original source. We made a large number of experiments on animals by inoculating them with tubercular material, leaving them for a week, and then putting them under treatment. We used in the first place monkeys, but they were too expensive, as we required large numbers. Guinea pigs were fortunately found to give exactly the same reaction, and they were afterwards used for all the ordinary experiments. We found that putting them under our treatment, a week after they had been inoculated with tubercular material, confined the lesion to the sore at the seat of the inoculation. We then tried putting healthy animals under our treatment for a week, and in some cases a fortnight, before inoculating them with tubercular material, and in these cases we prevented even the formation of an abscess at the seat of the inoculation.

We now considered that we were in a position to try our remedy on human patients, which we did with the most gratifying results. This investigation has been most thorough, and the results we have obtained were from a study of the disease in all its varying conditions. All animals have been most carefully examined during life and after death, and the results recorded, and when I state that over three hundred guinea pigs and nearly one hundred monkeys have been used, besides a number of other animals, I think you will admit that we have not arrived at any hasty conclusions.


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The following physicians registered at the 1940 Detroit convention on Tuesday and Wednesday, September 24 and 25, 1940:

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Carl E. Badgley, Ann Arbor; Robert H. Baker, Pontiac; Wm. Ballard, Bay City; Chas. W. Balser, Detroit; W. H. B. Barnum, Fremont; W. E. Barstow, St. Louis; S. G. Bates, Detroit; T. I. Bauer, Lansing; Otto Beck, Birmingham; M. G. Becker, Edmore; C. D. Benson, Detroit; G. W. Benson, Escanaba; H. M. Best, Lapeer; H. G. Bevington, Detroit; Andrew P. Biddle, Detroit; Wm. G. Birch, Sault Ste Marie; Wm. L. Bird, Greenville; Wm. E. Blodgett, Detroit; D. C. Bloemendaal, Zeeland; Chas. T. Bower, Detroit; C. E. Boys, Kalamazoo; D. R. Brasie, Flint; R. S. Breakey, Lansing; A. L. Brooks, Detroit; James D. Bruce, Ann Arbor; C. F. Brunk, Detroit; A. S. Brunk, Detroit; J. H. Burley, Port Huron; V. N. Butler, Detroit.

J. E. Caldwell, Detroit; A. L. Callery, Port Huron; A. M. Campbell, Grand Rapids; Don M. Campbell, Detroit; Joseph Carp, Detroit; C. H. Carpenter, Detroit; E. I. Carr, Lansing; H. R. Carstens, Detroit; Wm. J. Cassidy, Detroit; Chas. Castrap, Dearborn; A. E. Catherwood, Detroit; A. W. Chase, Adrian; Wm. P. Chester, Detroit; Lloyd H. Childs, Flint; C. A. Christensen, Dearborn; L. G. Christian, Lansing; Harold E. Clark, Detroit; T. Percy Clifford, Detroit; H. S. Collisi, Grand Rapids; R. C. Connelly, Detroit; Henry Cook, Flint; W. B. Cooksey, Detroit; R. G. Colyer, Detroit; G. A. Conrad, Marquette; T. H. Cooper, Port Huron; Burton R. Corbus, Grand Rapids; Henry F. Crossen, Detroit; Ethan B. Cudney, Pontiac; Howard H. Cummings, Ann Arbor; George J. Curry, Flint; Frank E. Curtis, Detroit.

Ernest D'Alcon, Detroit; Luther W. Day, Jonesville; T. E. DeGurse, Marine City; Dean C. Denman, Monroe; C. F. DeVries, Lansing; A. S. DeWitt. Detroit; Stuart L. DeWitt, Grand Haven; Harry F. Dibble, Detroit; M. P. Dillard, Detroit; Wm. M. Donald, Detroit; Sam W. Donaldson, Ann Arbor; J. D. Donovan, Detroit; Harvey E. Dowling, Detroit; F. M. Doyle, Kalamazoo; F. Drummond, Kawkawlin; O. E. Dutchess, Detroit.

C. H. Eisman, Detroit; C. T. Ekelund, Pontiac; W. C. Ellet, Benton Harbor; H. B. Elliott, Flint; Paul H. Engle, Oliver; Joseph M. Erman, Detroit.

David H. Fauman, Detroit; Geo. E. Fay, Detroit; H. B. Fenech, Detroit; W. L. Finton, Jackson; E. W. Fitzgerald, Detroit; Edw. O. Foss, Muskegon; L. Fernald Foster, Bay City; Mable Freeman, Detroit.

C. B. Gardner, Lansing; H. H. Gay, Midland; L. O. Geib, Detroit; J. S. Gellert, Detroit; L. W. Gerstner, Kalamazoo; Wm. H. Gordon, Detroit; C. S. Gorsline, Battle Creek; S. E. Gould, Eloise; T. K. Gruber, Eloise.

A. T. Hafford, Albion; H. C. Hansen, Battle Creek; F. E. Hansen, Detroit; R. B. Harkness, Hastings; S. W. Hartwell, Muskegon; C K. Hasley, Detroit; Wilfrid Haughey, Battle Creek; J. E. Hauser, Detroit; T. F. Heavenrich, Port Huron; L. L. Henderson, Detroit; Thos. J. Henry, Detroit; L. Chas. Hess, Bay City; Lee Hileman, Ecorse; Louis J. Hirschman, Detroit; T. E. Hoffman, Detroit; Martin H. Hoffmann, Eloise; Roy Herbert Holmes, Muskegon; R. J. Hubbell, Kalamazoo; J. G. Huizinga, Holland; L. W. Hull, Detroit; W. H. Huron, Iron Mountain.

Stanley W. Insley, Detroit; Arthur Isaacson, Detroit.

R. C. Jamieson, Detroit; Alpheus Jennings, Detroit; L. J. Johnson, Ann Arbor; Euclide Joinville, Detroit; J. Jonikaitis, Detroit.

H. I. Kallet, Detroit; Joseph A. Kasper, Detroit; L. R. Keagle, Battle Creek; Frank Kelly, Detroit; Chas. S. Kennedy, Detroit; Wm. Y. Kennedy, Detroit; C. R. Keyport, Grayling; Paul C. Kingsley, Battle Creek; F. O. Kirker, Sandusky; J. G. Kirker, Detroit; G. R. W. Kirton, Calumet; Paul A. Klebba, Detroit; S. Kleinman, Detroit; V. F. Kling, Jonia; Paul W. Kniskern, Grand Rapids; Harold J. Kullman, Detroit.

N. F. LaFrance, Battle Creek; Geo. L. LeFevre, Muskegon; W. E. Larson, Levering; P. L. Ledwidge, Detroit; W. C. Lambert, Marquette; John S. Lambie, Pontiac; M. B. Landers, Jr., Detroit; Lawrence LaPorte, Gladwin; V. S. Laurin, Muskegon; Chas. E. Long, Grand Haven; Martha Longstreet, Saginaw; Sherman L. Loupee, Dowagiac; Henry A. Luce, Detroit; Earl F. Lutz, Detroit.

Archibald McAlpine, Detroit; G. L. McClellan, Detroit; Roy D. McClure, Detroit; Carey P. McCord, Detroit; F. T. McCormick, Detroit; J. Earl McIntyre, Lansing; Richard M. McKean, Detroit.

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W. E. Nesbitt, Alpena; I. D. Nickerson, Detroit.

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E. O. Sage, Dearborn; G. B. Saltonstall, Charlevoix; H. F. Sawyer, Detroit; J. B. Seeley, Dearborn; A. H. Siebert, East Detroit; H. T. Sethney, Menominee; A. D. Sharp, Albion; Milton Shaw, Lansing; S. A. Sheldon, Saginaw; Geo. A. Sherman, Pontiac; D. L. Sherwood, Detroit; C. E. Simpson, Detroit; E. F. Sladek, Traverse City; R. M. Slate, Detroit; A. B. Smith, Grand Rapids; C. V. Smith, Detroit; Carl F. Snapp, Grand Rapids; G. H. Southwick, Grand Rapids; E. D. Spalding, Detroit; P. C. Spencer, Lansing; R. A. Springer, Centerville; Wm. J. Stapleton, Detroit; H. B. Steinbach, Detroit; D. C. Stephens, Howell; A. E. Stickley, Coopersville; H. D. Stricker, Detroit; W. F. Strong, Ontonagon; C. K. Stroup, Flint; O. D. Stryker, Fremont; O. H. Stuck, Otsego; P. E. Sutton, Royal Oak; M. R. Sutton, Flint; Geo. F. Swanson, Newberry.

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C. E. Umphrey, Detroit; P. R. Urmston, Bay City.

C. K. Valade, Detroit; C. F. Vale, Detroit; V. H. Vandevenner, Ishpeming; A. E. Van Nest, Detroit.

R. L. Wade, Coldwater; R. V. Walker, Detroit; J. S. Wendel, Detroit; A. V. Wenger, Grand Rapids; J. A. Wessinger, Ann Arbor; Bernard Weston, Detroit; A. H. Whittaker, Detroit; Anna L. Wilcox, Owosso; D. Bruce Wiley, Utica; H. W. Wiley, Lansing; W. S. Williams, Flint; E. R. Witwer, Detroit; R. A. C. Wollenberg, Detroit; M. G. Wood, Hart; Wm. P. Woodworth, Detroit.

G. H. Yeo, Big Rapids.

### Wednesday

Charles D. Aaron, Detroit; James R. Acocks, Houghton; Chester H. Adams, Grand Blanc; Leopold Adler, Detroit; Sidney Adler, Detroit; E. J. Agnelly, Detroit; H. R. Allen, Battle Creek; R. W. Alles, Detroit; Herbert S. Allison, Grosse Pt.; C. L. Ames, Detroit; Florence Ames, Monroe; T. G. Amos, Detroit; Walter Anderson, Detroit; Raymond C. Andries, Detroit; F. T. Andrews, Bay City; J. W. Ankley, Detroit; R. E. Anslow, Detroit; George L. Anthony, Flint; Philips R. Appel, Detroit; Burke Arehart, Detroit; A. G. Armstrong, Detroit; Z. R. Aschenbrenner, Farmington; J. Norris Asline, Essexville; A. U. Axelson, Detroit.

Myron Babcock, Detroit; M. E. Bachman, Detroit; A. C. Bachus, Powers; Vinton A. Bacon, Detroit; Harry E. Bagley, Dearborn; Robert Bailey, Clair Shores; Abel J. Baker, Grand Rapids; Charles H. Baker, Bay City; Clarence Baker, Detroit; Joseph A. Bakst, Detroit; M. A. Balerski, Detroit; F. W. Bald, Flint; Robert S. Ballmer, Midland; Gordon W. Balyeat, Grand Rapids; F. C. Bandy, Sault Ste Marie; Marion F. Barker, Detroit; Howard B. Barker, Pontiac; Louis L. Barnett, Detroit; F. Elizabeth Barrett, Kalamazoo; S. E. Barnett, Detroit; F. W. Bartholic, Grass Lake; Walter M. Bartlett, Benton Harbor; J. R. Barton, Detroit, A. Robert Bauer, Detroit; Ernest W. Bauer, Royal Oak; W. L. Baumann, Detroit; John G. Bayles, Detroit; Willard Beattie, Ferndale; M. B. Beckett, Allegan; Carl B. Beeman, Grand Rapids; L. E. Beeuwkes, Dearborn; S. K. Beigler, Detroit; Henri Belanger, River Rouge; A. L. Benedict, Jr., Muskegon; C. H. Benning, Royal Oak; Davis A. Benson, Detroit; Neil Bentley, Detroit; Louis Beresh, Detroit; Lawrence A. Berg, Centerville; Richard H. Berg, Oxford; Clarence A. Berge, Detroit; Harry S. Berman, Detroit; Robert Berman, Detroit; Bernard Bernbaum, Detroit; Samuel Bernstein, Detroit; Eli N. Bernstein, Flint; Wm. L. Bettison, Grand Rapids; E. A. Bicknell, Detroit; F. R. Bicknell, Detroit; Don L. Bishop, Flint; N. M. Bittrich, Detroit; Perry S. Black, Detroit; M. J. Blaess, Detroit; A. C. Blakeley, Flint; E. W. Blanchard, Deckerville; F. N. Blanchard, Detroit; Jos. Bleier, Detroit; Abraham Bloch, Detroit; N. Berneta Block, Lansing; Franz Blumenthal, Detroit; Jas. J. Boccia, Detroit; A. P. Boell, Detroit; Leon M. Bogart, Flint; S. Stephen Bohn, Detroit; A. T. Bonathan, Flint.

*The above list represents the registration for Tuesday, September 24, and part of Wednesday, September 25, 1940. The list of those who registered subsequently will be published in succeeding issues of* THE JOURNAL.

The JOURNAL
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# Gonococcal Infections

## Diagnosis and Criterion of Cure*

By Adolph Jacoby, M.D.
Medical Supervisor Social Hygiene Clinics
New York City Dept. of Health

### Diagnosis in Women

Adolph Jacoby, M.D.
*M.D., Cornell Medical School, 1909. Assistant Professor of Gynecology, New York Post Graduate Hospital. Lecturer, Preventive Medicine, New York University College of Medicine. Medical Supervisor, City of New York Department of Health. Special Consultant, United States Public Health Service. Clinic Consultant, New York State Department of Health. Member, American Medical Association and American Neisserian Medical Society. Fellow, Academy of Medicine, Section of Obstetrics and Gynecology; and American College of Surgeons.*

■ The diagnosis of gonorrhea in women is very frequently overlooked both in private practice and in institutions. This may be readily appreciated when it is noted that of the 12,928 cases of gonorrhea reported in 1938 in New York City, 3,121 were females, and in 1939, of 12,807 cases, 2,827 cases were females (Table I). This indicates that male gonorrhea is reported about three times as much as is female.

That this condition is not a local occurrence may be gathered from statistics for the years 1935 and 1936 of England and Wales. During 1935, 27,506 males and 7,732 females having gonorrhea were reported; during 1936, 28,137 males and 7,715 females were reported (Table II).

TABLE I. INCIDENCE OF GONORRHEA REPORTED TO NEW YORK CITY

| | Male | Female | Total |
|---|---|---|---|
| 1931–1936 | 54,419 | 14,011 | 68,430 |
| 1938 | 9,807 | 3,121 | 12,928 |
| 1939 | 9,980 | 2,827 | 12,807 |
| Total | 74,206 | 19,959 | 94,165 |

TABLE II. INCIDENCE OF GONORRHEA REPORTED TO ENGLAND AND WALES

| | Male | Female | Total |
|---|---|---|---|
| 1935 | 27,506 | 7,732 | 35,238 |
| 1936 | 28,137 | 7,715 | 35,852 |
| Total | 55,643 | 15,447 | 71,090 |
| N.Y.C. | 74,206 | 19,959 | 94,165 |
| Grand Total | 129,849 | 35,406 | 165,255 |

**The reason for the marked difference in numbers of cases of females reported lies largely in the fixed belief of most physicians that the diagnosis can only be made on laboratory evidence. The usual laboratory evidence employed is the smear, culture, and complement fixation blood test. The value of each of these laboratory procedures in detecting gonorrhea will be briefly discussed.**

*Smear.*—In order to derive the utmost information from smear examination, it is essential that the smears be carefully taken. The secretion from each source should be obtained on a swab with as little contamination from adjacent areas as possible. The smear, itself, should be carefully rolled out on the slide and examined after being stained by Gram stain. The interpretation of the smear must be carefully done. In an analysis of 1,482 women examined in prison and found to have gonorrhea, 34.2 per cent

*Presented before Ingham County Medical Society as part of the Fall Symposium on Gonorrhea, 1940.

TABLE III. COURT CASES—WOMEN
January through September, 1940

| | | | |
|---|---|---|---|
| Total Examinations | 4,262 | 100.0% | |
| Diagnosed Gonorrhea | 1,482 | 34.8% | 100.0% |
| Clinical Gonorrhea | 528 | 12.4% | 35.6% |
| —Positive Smear | 57 | 1.3% | 3.8% |
| —Positive Culture | 124 | 2.9% | 8.4% |
| —Positive Smear—Culture | 106 | 2.5% | 7.2% |
| Positive Smear | 115 | 2.7% | 7.8% |
| Positive Culture | 323 | 7.6% | 21.8% |
| Positive Smear—Culture | 229 | 5.4% | 15.4% |

had positive smears (Tables III and IV). If the smear alone were used as a criterion for diagnosis, 65.8 per cent of those diseased would have been overlooked.

*Culture.*—Culture of the gonococcus requires a well-organized and well-equipped laboratory with bacteriologists specifically trained in gonococcus culture diagnosis. There are, as yet, a number of difficulties in the taking and transmitting of specimens for culture diagnosis. A time lapse beyond three hours after obtaining the specimen is apt to show an overgrown culture. Among 1,482 cases diagnosed, 52.8 per cent showed positive cultures (Tables III and IV). If cultures alone were used as a diagnostic criterion, 47.2 per cent of the cases would be overlooked. It is, therefore, evident that both smears and cultures are essential in reaching the maximum number that can be diagnosed by laboratory methods.

*Complement Fixation Test.*—The complement fixation test in its present state is of very uncertain value. In an investigation of the value of the complement fixation test conducted in 1937,[1] of a total of 760 patients examined, over 13 per cent showed non-specific reaction. This one factor alone immediately indicates that the test is not yet of sufficient value for diagnostic or treatment control purposes.

### Clinical Diagnosis

It is quite obvious that the most thorough laboratory diagnosis falls far short of uncovering the existing gonorrhea. This is readily seen

TABLE IV. FEMALE COURT EXAMINATIONS
First Nine Months

| | | |
|---|---|---|
| Total Examinations | 4,262 | 100.0% |
| Total Gonorrhea | 1,482 | 34.8% |
| Clinical Gonorrhea | 528 | 12.4% |
| Clinical Gonorrhea with Positive Laboratory | 287 | 6.7% |
| Laboratory Gonorrhea | 667 | 15.7% |

in our examination of 4,262 arrested prostitutes where, out of this entire group, only 22.4 per cent were discovered to have gonorrhea as a result of smear and culture examination (Tables III and IV). Admittedly, in this specialized group, a considerably greater percentage are actually infected with the disease. In order to uncover as much of this balance as possible, it is essential that a thorough knowledge of clinical diagnosis in gonorrhea be disseminated among the medical profession. Unfortunately, at this time this knowledge is not very widely present. This is largely due to the fact that gonorrhea in women in the vast majority shows but very few clinical evidences of the existence of the disease. The clinical diagnosis of gonorrhea in women depends upon a summation of the history, symptoms and clinical signs.

*History.*—**In no other diagnosis is a detailed and searching history so essential as in diagnosis of gonorrhea in women. This history must include a searching inquiry into the past existence of urinary symptoms and vaginal discharge.**

During the acute stage of the disease, frequency and burning on urination are very prominent symptoms. Also in this stage, there is invariably a profuse purulent cervical discharge associated with general feeling of uneasiness in the pelvis and general discomfort. Unfortunately, these acute symptoms do not last very long and in approximately seven to ten days, subsidence of symptoms begins. Such a patient presenting herself six to eight months later to the doctor will, in all likelihood, have completely forgotten these incidents. An essential part of clinical diagnosis is inquiry into the occupation and mode of life of the patient. All possible sex contacts with individuals who may harbor

the infection must be uncovered. Most women are more or less accustomed to the presence of vaginal discharge and exacerbation of this discharge for a brief interval is very likely to be unreported six months later. It is, therefore, necessary to jog the patient's memory to uncover such evidence.

*Symptoms.*—The symptoms in the acute infection are very clear and obvious. The patient complains of marked frequency and burning on urination, a profuse purulent vaginal discharge, a feeling of discomfort and even pain in the pelvis, occasionally accompanied by general symptoms of malaise and slight temperature. As a rule, in uncomplicated infections such acute symptoms subside in from seven to ten days. The vast majority of patients present themselves with an infection of anywhere from six months' duration or longer. In such patients, unless there is pelvic cellular or adnexal complications, there is practically no discomfort but there is slight frequency of urination and scant cervical discharge. Where pelvic cellular or adnexal complications exist, pain in one or the other lower adbominal quadrants and back will be a prominent symptom.

*Clinical Signs.*—The usual site of infection involves both the cervix and the urethra. In very few instances, probably less than 10 per cent, does infection in one or the other location alone exist. Infection may start, and usually does, in the cervix inasmuch as the transmission of the infection to the female usually occurs from some male with a chronic disease. The clinical signs in the acute stage of the disease are clearly obvious. There is a marked redness around the external urinary orifice associated with edema and the presence of purulent discharge exuding from the urethra or expressible from the urethra with the slightest pressure. The area of Bartholin's gland, if the gland is involved, will show a marked redness with perhaps purulent secretion expressible from the orifice of the duct. The cervix will show a marked redness, edema and profuse purulent discharge exuding from the external os. In the chronic stage all these symptoms have diminished almost to the vanishing point and the failure to detect the few remaining signs is frequently responsible for the failure to diagnose chronic gonorrhea. The area around the duct of the Bartholin's gland must be very carefully inspected. Occasionally the orifice of the duct is surrounded by a small reddened areola, the so-called Saenger's spot. The duct, itself, may be enlarged, thickened or distended. The gland, when enlarged, may be palpated by deep lateral or posterolateral palpation with one finger in the vagina and the other outside on the perineum. Such enlargement may be inflammatory.

**The urethra must be very carefully examined to detect the few physical signs remaining in chronic urethral involvement. To uncover the slight discharge present, it is essential that the urethra be compressed at its vesical neck against the posterior surface of the symphysis and the expression carried forward from the vesical neck to the external urinary meatus in a continuous maneuver. Great care must be exercised not to release the pressure especially after rounding the under border of the symphysis and up the lower portion of the anterior surface. This is important because otherwise Skene's glands will not be expressed and very frequently the only existing discharge remaining is located in these glands.**

In addition to the presence of discharge, there may be a thickening along the entire urethra and in an old, chronic inflammation, the urethra will roll under the finger like a lead pencil. The ducts of Skene's glands may be thickened and feel like a strand of catgut in the tissues. The cervix will always show more or less mucopurulent or purulent discharge from the external os. The cervical tissues will be bulky and edematous, and, in approximately one-third of the patients, cervical erosion and nabothian follicle cysts will be in evidence. This picture in the cervix is practically the same for inflammation resulting from any other organism. The extension of inflammation from the cervix occurs rapidly through the numerous lymphatics in the parametrial tissues, particularly posteriorly and laterally. This will give rise to inflammatory thickening in the uterosacral and the bases of the broad ligaments. Further extension through the lymphatics in the broad ligaments will produce tubal and ovarian involvements. Such involvements are evidenced by thickening or mass formation of varying size and tenderness in the adnexa. Extension of the inflammation in the

pelvic lymphatics may produce a pelvic cellular involvement. In this event, the pelvic cellular tissues above the vault of the vagina will be extensively infiltrated, sometimes stony hard and extremely sensitive to touch or motion of any of the pelvic organs. An extension of this inflammation beyond the confines of the cellular tissues leads to a pelvic peritoneal involvement.

### Summary

The diagnosis of gonorrhea must be made from a summation of the various factors obtained from the history, symptomatology, physical signs and laboratory reports.

The pertinent factors in the history are (1) the possibility of contact with infected individual; (2) the past history of urinary frequency and dysuria; (3) the past history of profuse purulent vaginal discharge; (4) pain or discomfort in the lower abdominal quadrant.

In the symptomatology, the important factors are (1) the presence of frequency, especially nocturia, and pain on urination; (2) the presence of vaginal discharge; (3) pain in the lower abdominal quadrant may or may not be present.

The important physical signs are (1) purulent discharge from the urethra; (2) purulent discharge from Skene's glands; (3) thickening along the length of the urethra; (4) redness around the orifice of Bartholin's glands; (5) redness or swelling in Bartholin's glands; (6) expression of pus from the orifice of Bartholin's glands; (7) purulent discharge from the external cervical os; (8) hypertrophy and edema of the cervix; (9) erosion of the cervix; (10) presence of nabothian follicle cysts; (11) thickening and tenderness in the parametrial tissues especially posteriorly and laterally; (12) thickening and tenderness in the adnexa; (13) pelvic cellular inflammation; (14) pelvic peritoneal inflammation.

The factors of importance in the laboratory reports are (1) positive gram negative intracellular or extracellular diplococci in the smear from the secretions of the urethra, cervix or Bartholin's glands; (2) positive culture for gonococci from the urethra, cervix or Bartholin's glands.

It is by careful evaluation of all of the above items that as much of gonorrhea in women as it is possible to uncover with our present knowledge will be diagnosed.

### Criteria of Cure

**In view of the present treatment of gonorrhea with various sulfonamide compounds and the as yet unsolved problems in relation to their action, it is especially important that our criteria of cure be sufficiently searching to uncover any incompletely cured infection.**

*The Male.*—The first indication of cure is the disappearance of all clinical signs of disease. This includes an absence of urinary frequency, dysuria and urethral discharge. Examination at this time should show clear urine in both glasses in the usual two-glass urine examination, normal prostate, seminal vesicles, Cowper's glands, and epididymes.

When this stage is reached, all treatment should be suspended for one week. At the end of that time, a urethral smear following stripping or scraping of the mucosa is taken and examined by Gram stain. If gonococci are absent, the prostate and seminal vesicles are massaged and the secretion examined for gonococci and pus cells. The practice of Pelouze (1939)[2] of receiving this discharge in a tube of sterile distilled water, centrifuging, and examining the sediment is quite efficient.

If this examination is negative, provocative measures are instituted. The first of these is the passage of a urethral sound up to the posterior urethra, and massaging the urethra over this sound to express pus and gonococci from the urethral crypts. The patient is given some clean slides with instructions to secure any subsequent discharge and bring it in for examination. After a four-day interval 1 to 2 c.c. of 0.5 to 1 per cent silver nitrate solution is instilled through a cannula into the posterior urethra, continuing the injection as the cannula is withdrawn. Examination of any resultant discharge must be negative for gonococci. Prostate should be massaged and secretion examined as previously.

If all examinations are negative, the patient is instructed to drink beer or other alcoholic beverage. Any resulting discharge must be examined for gonococci. The above series of examinations should be repeated twice after an intervening monthly interval of negative clinical evidence of disease.

If all examinations prove negative, the patient may be pronounced cured but should be warned

that in all sexual intercourse for the suceeding six months, he should resort to condom protection. The time consumed in these tests is approximately five months.

*Female Adult.*—In the female, the determination of cure is more difficult than in the male. Here, a searching examination to determine the absence of all clinical and physical evidence of infection is of the utmost importance. No determination of cure should be begun until all clinical symptoms and physical signs are absent.

An examination of smears and cultures from the urethra, Bartholin's glands and cervix should be made beginning one week after the cessation of treatment. These specimens should be obtained every week for the next six weeks and every other week thereafter until six more smears and cultures have been taken and examined. All these specimens must be negative for gonococci.

If, at the end of this period, all symptoms, clinical signs, and laboratory reports are negative, patient may be discharged as cured. Time consumed is approximately five months.

*Female Children.*—The cure of children with vaginitis is only determinable after sufficient time has elapsed following the cessation of treatment. The first step in this determination is the absence of all symptoms and clinical signs. At this point, treatment is interrupted for one week. At the end of this week, a series of six smears and cultures from the vagina, cervix and rectum are taken and examined at weekly intervals. Following this, a period of one month should elapse before a repetition of another series of six smears and cultures. At the end of this time, still another series of six smears and cultures should be taken and examined after a one month's lapse. The time consumed for these series of examinations and observations is approximately six to seven months.

The necessity for such long observation is indicated by the occurrence of what appears to be spontaneous cure in this disease after an interval of as much as twenty-four weeks after the onset of the disease.

## Conclusion

**The control of gonorrhea depends largely on the accuracy with which the existing disease, particularly in women, is uncovered and the thoroughness with which cure is determined after proper treatment has been carried out. It is, therefore, necessary that instruction in accurate diagnosis be made available to the entire medical profession. It is also necessary to indicate that the only sure method for determining cure is by prolonged observation and persistently negative physical symptoms, physical signs, and smears and cultures.**

Provocative measures in the female have long ago been abandoned. I feel that in the male also provocatives are not of much value.

With the wide use of sulfonamide compounds, the only safe procedure for determining definite cure is by reliance on prolonged observation and persistently negative laboratory findings.

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### LEADERSHIP

There can be no *dictator* in Organized Medicine. The Board of Trustees is the Executive Body in both the A.M.A. and in the State Societies. Increasingly, the need for a similar executive group is being appreciated and provided for in the component county societies.

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The House of Delegates makes the final rules and regulations. Even the Executive Board—the Trustees—can make rulings to govern only until the next meeting of the House of Delegates.

The members of the Board of Trustees accept the responsibility inherent in their election, and serve unhesitatingly, fairly, and consistently in promoting the best interests of the profession.—*The Journal of the Medical Society of New Jersey,* April, 1941.

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"Immeasurable fertility" is a population slogan for the German people coined by Heinrich Himmler in a new booklet for S.S. men. David M. Nichol, reviewing the publication in a dispatch from Berlin to the *New York Post,* says Himmler's argument is that Germany must have children to make up its losses on the battlefields if her victories are to be maintained. "To have only two children is described as 'cowardly living.' The standard must be four to six," the booklet says, and forecasts a Reich of 120 million persons, compared to the present 90 million. "Illegitimate children," it goes on, "are also valuable members of the national community, providing their parents are hereditary healthy Nordics." The dispatch points out that Himmler's appeal is another "attempt to stem a downward trend in the birth rate which first became evident in May, 1940. Sale of contraceptives, for example, has been stopped completely."

# Gonorrhea in the Female*

By Rogers Deakin, M.D.

and

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The records of the St. Louis Maternity Hospital show that up until a short time ago virtually every woman admitted to the wards for delivery who also was infected with gonorrhea developed an acute postpartum gonococcal salpingitis about ten days after delivery. Most of these women had been observed for some months previously in the outpatient department where their gonorrhea had been recognized and treated with mild local therapy.

Such cases have been treated since the first of the year in the newly organized clinic for female gonorrhea. This clinic began as a subsidiary to an already functioning well-organized male clinic but now rivals the latter because of its effectiveness as a treatment agency for contacts and sources. During these months six successive women in the first group of 50 cases of female gonorrhea have been rendered non-infectious with a single course of sulfathiazole alone despite their associated pregnancy, have been delivered and have finished their stay in the hospital without any clinical or bacteriologic evidence of gonorrhea.

It will take more than six cases to have convincing evidence of the effectiveness of the treatment used but the experience does indicate the promise which sulfathiazole gives for the ultimate control of female gonorrhea.

The women under study in this clinic are ambulatory patients. They are under no obligation to come for examination and under no coercion to receive treatment or to continue under observation for the four months which the routine requires. The lapse rate from observation (10 per cent) is extremely low, however, due to the intensive caseholding and casefinding technics which are available. Over fifty unselected cases of female gonorrhea confirmed by culture have now received a single course of 20 grams of sulfathiazole at the rate of 4 grams a day for five days. Six out of the first fifty have had one repeat course. No other therapy, oral or local, has been used. Each woman returns once a week for 3 weeks to be examined and to have smears and cultures made from the urethra and cervix. If negative reports are obtained, she then returns for the same procedure once a month for 3 months before dismissal.

**The most important consideration (Fig. 1) is the consistency with which the cases are rendered non-infectious at the end of this five-day treatment period. Rapid sterilization of the gonococcal infection in a woman is of paramount importance for at least three reasons: (1) to prevent spread of infection to the male, (2) to prevent the complications in women which so frequently occur from gonorrhea at the time of menstruation and (3) to decrease the incidence of gonorrheal ophthalmia.**

It would appear that in sulfathiazole we have an effective agent with which to accomplish this rapid change from an infectious to a non-infectious state without fear of any untoward reactions. It has not been necessary to stop or decrease the amount of drug given any patient in this series because of toxic side reactions although about half of the cases have complained of some transient nausea.

The accumulated experience with sulfonamide therapy in gonorrhea is most impressive in one regard, namely to limit sharply the time interval during which sulfonamide treatment is given a trial. The best interests of the patient are not served by continuing sulfathiazole or any sulfonamide much over a week's time. It can be said

*From the Washington University Clinics, Saint Louis, Missouri, in coöperation with the State Board of Health of Missouri.

Presented before the Ingham County Medical Society as part of the Fall Symposium on Gonorrhea, 1940.

now without equivocation that if the desired result is not obtained quickly, it more than likely will not be obtained at all. As a matter of fact, it would appear that prolonged sulfonamide administration prevents the development of an immunity response to the gonococcus. Certainly, a patient suffering from anorexia, loss of weight and perhaps an anemia, the result of prolonged sulfonamide therapy, is not in the best condition to throw off a gonococcal infection.

One of the most gratifying developments of sulfonamide therapy in gonorrhea deals with the abandonment of local treatment. It has always been difficult to justify the use of many forms of local manipulation or application in female gonorrhea. This has been true of the chemically irritant drugs and the mechanically traumatizing procedures in both male and female. It has been particularly true of the many unnecessary and unwarranted operations to which women with acute gonococcal salpingitis have been subjected.

Much credit is due those who, even in the pre-sulfonamide era of gonorrheal therapy, insisted that local treatment to the female should be confined to douching or vaginal irrigations with weak permanganate or lactic acid solutions warmed to body temperature. At least, this did not interfere with the body defense mechanism against the gonococcus if the douche was taken properly; i.e., in a recumbent position and under low pressure.

The rationale for a weak acid douche such as 1:2000 lactic acid is based on the pH studies of vaginal and cervical secretions. The endocervical glands produce an alkaline secretion while the vagina is normally acid. A gonococcal endocervicitis accentuates the production of alkaline secretions which get into the vagina. The growth of the Doderlein bacillus, a normal inhabitant of the vagina, is discouraged by an alkaline environment and many observers feel that growth of this bacillus deters the growth of the gonococcus.

The initial stage of female gonorrhea is an invasion of the external genitals and urethra accompanied by an intense inflammatory reaction of mucosal surfaces. This is followed by invasion of one or more of the structures lined with columnar epithelium such as Skene's, Bartholin's or the cervical glands. Even the mildest sort of douching is not logical in this stage of infection. On the other hand, oral medication should be started immediately. Unfortunately, few women recognize an early gonorrhea for what it is and seek medical service. The usual patient is first seen after this active invasive phase has partially subsided into the second or colonizing phase of infection or has progressed to a more chronic third phase of general pelvic involvement.

The second stage, in the light of our present experience, still offers an opportunity for sulfathiazole therapy. The mild douches previously described may be withheld unless oral treatment fails to render the patient non-infectious. The cervix offers the last barrier between a gonococcal invasion of the lower pelvic structures and the upper pelvic structures or tubal and peritoneal zones. Hence, nothing of a traumatic nature should be done to disturb the defensive properties of the cervical glands at this stage. Sulfathiazole failure cases in the colonizing type of infection are handled best by resorting to a thorough trial with permanganate or lactic acid douches. A persistent Skenitis or endocervicitis which does not respond to either oral or local therapy as described calls for the eradication of the gonococcal focus by more intensive means. Destruction of the infected gland bearing area by the various chemical or physical modalities usually employed is a logical and effective means of achieving a cure under such circumstances.

**The suggestions made by the female section of the American Neisserian Medical Society in 1940 regarding acute gonococcal pelvic inflammation are worth repeating. They call for general medical care, rest in bed, heat or cold to the lower abdomen, regular intestinal elimination, liquid or soft diet, no alcohol, anodynes for pain and avoidance of all trauma. The addition of a course of sulfathiazole to the above régime seems warranted although again we would limit the treatment period to approximately five days.**

Chronic pelvic inflammation calls for the same consideration. Sulfathiazole will render the majority of such cases non-infectious. However, the pelvic adhesions which are present may prevent the patient's becoming asymptomatic. This seems to be true particularly of those women who have borne children and who have a retroversion. Here, pelvic surgery seems to offer the only chance for complete alleviation of the chronic invalidism induced by the mechanical abnormalities present in the pelvis, either with or without specific infection.

# TREATMENT OF GONORRHEA IN THE ☐ MALE ☒ FEMALE

March 1940 -

**THERAPY — LOCAL:** NONE **ORAL:** SULFATHIAZOLE (Winthrop) Four grams daily for five days

WASHINGTON UNIVERSITY CLINICS, ST. LOUIS, MISSOURI †

| Pt.# | NAME | RACE | MARITAL | CLINIC NO. | FINAL DISPOSITION |
|---|---|---|---|---|---|
| 1 | [redacted] | W | M | E 29897 | Cured |
| 2 | [redacted] | C | M | C 32577 | Cured |
| 3 | [redacted] | W | M | E 34663 | Chg to loc.thy |
| 4 | [redacted] | C | M | C 61341 | Cured |
| 5 | [redacted] | W | M | C 71237 | Cured |
| 6 | [redacted] | N | M | E 31173 | Cured |
| 7 | [redacted] | W | M | E 33956 | Chg to loc.thy |
| 8 | [redacted] | C | M | E 9174 | Cured |
| 9 | [redacted] | W | S | E 22754 | Cured |
| 10 | [redacted] | C | S | E 20747 | Reinfected |
| 11 | [redacted] | C | S | E 20747 | Cured |
| 12 | [redacted] | W | S | E 27792 | Cured |
| 13 | [redacted] | C | M | E 28969 | Cured |
| 14 | [redacted] | W | M | E 29593 | Cured |
| 15 | [redacted] | C | M | E 19233 | Lost |
| 16 | [redacted] | W | M | E 32675 | Transferred |
| 17 | [redacted] | C | M | E 17901 | Reinfected |
| 18 | [redacted] | C | M | E 17901 | Lost |
| 19 | [redacted] | C | S | E 28082 | Reinfected |
| 20 | [redacted] | C | S | E 28082 | Unsat for study |
| 21 | [redacted] | C | S | E 21376 | Cured |
| 22 | [redacted] | W | S | C 95494 | Unsat for study |
| 23 | [redacted] | W | S | E 32533 | Cured |
| 24 | [redacted] | C | S | C 45416 | Cured |
| 25 | [redacted] | W | S | E 32429 | Cured |
| 26 | [redacted] | C | S | E 33483 | Cured |
| 27 | [redacted] | C | S | E 23732 | Cured |
| 28 | [redacted] | C | M | E 30560 | Cured |
| 29 | [redacted] | W | M | E 28609 | Cured |
| 30 | [redacted] | C | M | E 23497 | Cured |
| 31 | [redacted] | C | M | C 61135 | Lost |
| 32 | [redacted] | W | M | E 34000 | Cured |
| 33 | [redacted] | W | S | E 34126 | Lost |
| 34 | [redacted] | W | S | C 26830 | Cured |
| 35 | [redacted] | W | M | E 34233 | Lost |
| 36 | [redacted] | W | S | E 31360 | Cured |
| 37 | [redacted] | W | S | E 30025 | Cured |
| 38 | [redacted] | W | S | E 15316 | Cured |
| 39 | [redacted] | C | S | E 12336 | Cured |
| 40 | [redacted] | C | M | C 90794 | Lost |
| 41 | [redacted] | W | S | E 26306 | Reinfected |
| 42 | [redacted] | W | S | E 26306 | Reinfected |
| 43 | [redacted] | W | S | E 30103 | Cured |
| 44 | [redacted] | C | S | C 93396 | Cured |
| 45 | [redacted] | C | S | C 93396 | Unsat for study |
| 46 | [redacted] | W | S | E 32723 | Cured |
| 47 | [redacted] | C | M | E 32377 | Cured |
| 48 | [redacted] | W | S | E 32239 | Cured |
| 49 | [redacted] | C | M | E 30164 | Reinfected |
| 50 | [redacted] | C | M | E 30164 | Cured |

BACTERIOLOGIC PROGRESS BY WEEKS

**LEGEND**

- ■ POSITIVE SMEAR OR CULTURE
- 0 NEGATIVE SMEAR OR CULTURE
- ▬ BACTERIOLOGIC AND CLINICAL CURE
- ---- LAPSE IN TREATMENT OR CLOSED WITHOUT PROOF OF CURE
- ═══ CHANGE IN ORAL THERAPY
- • PRIOR TREATMENT WITH ANOTHER DRUG

RECAPITULATION BY WEEKS

| TOTAL 50 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 52 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Positive Smears or Cultures | 50 | 0 | 2 | 3 | 2 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Negative Smears or Cultures | 0 | 35 | 33 | 31 | 31 | 31 | 30 | 28 | 28 | 27 | 27 | 25 | 24 | 23 | 20 | 19 | 19 | 19 | 19 |
| Lapses or Closed Without Proof of Cure | 0 | 15 | 17 | 18 | 18 | 18 | 19 | 20 | 22 | 22 | 23 | 25 | 26 | 27 | 30 | 31 | 31 | 31 | 31 |
| Changes in Oral Therapy | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cures | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 5 | 5 | 9 | 12 | 12 | 12 | 12 |
| **PER CENT** | | | | | | | | | | | | | | | | | | | |
| Positive Smears or Cultures | 100 | 0 | 4 | 6 | 4 | 2 | 2 | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Negative Smears or Cultures | 0 | 70 | 66 | 62 | 62 | 62 | 60 | 56 | 56 | 54 | 54 | 50 | 48 | 46 | 40 | 38 | 38 | 38 | 38 |
| Lapses or Closed Without Proof of Cure | 0 | 30 | 34 | 36 | 36 | 36 | 38 | 40 | 44 | 44 | 46 | 50 | 52 | 54 | 60 | 62 | 62 | 62 | 62 |
| Changes in Oral Therapy | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Cures | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 10 | 10 | 10 | 18 | 24 | 24 | 24 | 24 |

| DISPOSITION SUMMARY | No. | % |
|---|---|---|
| CURED | 32 | 64 |
| CLOSED WITHOUT PROOF OF CURE: | 18 | 36 |
| Lost | 6 | 12 |
| Unsatisfactory for study | 3 | 6 |
| Transferred | 1 | 2 |
| Reinfected | 6 | 12 |
| Left city | 0 | 0 |
| ORAL THERAPY CHANGED | 2 | 4 |
| OTHER: | | |

Dudley R. Smith
Physician

The reasons for failure in the treatment of gonorrhea result for the most part from negligence on the part of the patient, lack of coöperation in any treatment scheme, ignorance, over-treatment and the injudicious use of sulfonamides. The latter is excusable because of the rapidity with which these drugs have come into use. It has long been recognized, however, that gonorrhea is fundamentally a self-limited disease. Over-treatment, therefore, only serves to nullify nature's efforts to effect a cure. Negligence on the part of the patient is usually due to ignorance and therefore responsive to education. Again, education is our best weapon to control the incorrigible patient.

The wide variability of the problems of the woman with gonorrhea make women more difficult to control than male patients. Yet, some of the most gratifying instances of response to such psycho-therapy as we have to offer the incorrigible patient come in the female group.

It seems quite likely that the number of sulfonamide-resistant cases of female gonorrhea will increase as time goes on. Unauthorized self-medication or improper sulfonamide therapy already presents a difficult problem in male gonorrhea. We feel that sulfathiazole therapy should not be continued for more than 5 days and that the course should not be repeated in the event of relapse. The rapidity with which the great majority of cases respond to sulfathiazole strongly suggests that nothing is to be gained by continuing to give the drug to those few cases which remain infectious at the expiration of five days of treatment or to those in whom relapse occurs. Previous experience with the chronicity of sulfanilamide resistant cases in the male would support this opinion. We have repeated the course in a few instances where there was a return of the infection. In most of these cases, subsequent investigation of the patient and her contacts would indicate that the return was in all probability a reinfection after exposure with a known infectious source.

A large portion of our sulfathiazole failures are in men who have been on sulfanilamide previously without benefit. Our routine requires delaying the use of sulfathiazole in such instances until there is reasonable assurance that any inhibiting influence from previous sulfonamide therapy is gone. This is judged by the time elapsing since the previous chemotherapy, by the physical condition of the patient and the type and extent of his or her infection. This interval of time during which sulfathiazole therapy is withheld offers an opportunity to improve the patient's nutrition and general resistance by means of a high caloric, high vitamin diet and the stimulating effects of conservative local treatment.

We have not resorted to hyperpyrexia in a refractory female infection though we have made use of fever therapy in a few instances of stubborn infections or cases with severe complications in the male. It is our opinion that fever therapy should be reserved for such cases and with a considerable confidence as to the outcome. Also, it is our belief that the more sulfonamide has been given to a sulfonamide failure, the less responsive he will be to fever therapy.

It is our impression that the patient who has remained clinically and bacteriologically negative for several weeks after sulfathiazole therapy was stopped probably has been cured. A return of the symptoms and bacteriologic evidence of gonorrhea after such an interval is usually considered as a relapse and was so recorded in Cases 3, 17, 41, 45, and 46 (Fig. 1). However, in each of these cases a comparison of the patient's history with that of her consort would suggest that re-exposure and reinfection was either certain or at least extremely probable.

The return after an interval of several weeks of clinical evidence of infection without confirmation by smear or culture has been noted repeatedly in our series. Vaginal inflammation and discharge reappear in these cases but the cultures remain negative. Smears are apt to be misleading because of the variety of organisms encountered. Without culture facilities, the natural inclination of the physician would be to consider this as a relapse. However, the consistency with which negative gonococcal cultures are obtained in these cases lead us to believe that a nonspecific bacterial process is reasserting itself after an initial bacteriostatic sulfathiazole effect has worn off. Lactic acid douches have been successful in overcoming this complication.

Until such time as a central statistical agency is established for the accurate evaluation of the chemotherapy of female gonorrhea, extreme caution will have to be exercised in the prognosis given to female gonorrheics. Too many variables are present to make a number of isolated reports

of small groups of patients very significant. The adoption of a standard record form and its use in treatment centers would expedite the accumulation of sufficient data in a central statistical agency upon which to draw accurate conclusions.

**The substitution of chemotherapy for local therapy as much as possible on the principle that a gonococcal infection is fundamentally a constitutional rather than a local disorder is also now in order. The fact that the manifestations of a female gonorrhea are for the most part confined to local processes in the genital tract does not detract from this approach to therapy. Once the possibilities of specific chemotherapy have been thoroughly canvassed, then better agreement may be had as to when and what local treatment should be used in the event of chemotherapeutic failure.**

The control of gonorrhea is predicated upon an effective treatment of female gonorrhea. There is every reason to believe that with sulfathiazole we approach the ideal of a rapid sterilization of gonococcal infections in the female by means of oral medication alone. This does not imply, however, that a patient may disregard the ordinary rules of behavior laid down for a gonorrheic or that the physician is relieved of his responsibility to the patient during oral therapy or until there is reasonable assurance of cure.

NOTE: The sulfathiazole used in this study was furnished by the Department of Medical Research of the Winthrop Chemical Company, New York City.

### BLITZKRIEG ON SYPHILIS

At the Annual Meeting in Grand Rapids this fall, Loren Shaffer of Detroit will tell you how some cases of syphilis may be cured in less than a week; if you attend the meetings of the Section on Dermatology and Syphilology.

The officers of the Section announce that this is only one of the valuable and practical papers for which they have arranged to help you handle your dermatological patient.

Doctor Shaffer has been conducting clinics at the Receiving and Providence Hospitals in Detroit in which the new "massive chemotherapy" method is used. This work has been done in collaboration with other clinics and you will be given a clear comprehensive report on its technique and results.

The Section officers believe that if you treat syphilis you owe it to your patients and yourself to hear this paper.

# Gonorrhea in the Male*

## Modern Treatment

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■ AFTER a long, long sleep it is obvious that something really is going to be done toward the control of gonorrhea. Within the last few years things have been happening that have overcome many of the barriers that stood in the way of this disease making the grade from the "sin" class into those upper reaches where a disease is really a disease. Indeed, one who watches his step just a little, can even make it table talk in polite society. And, when a disease reaches that point just about every physician is better off if he takes time to really learn enough about it to fit him for the giving of sensible answers to the countless questions sure to come his way.

It has not been the custom of physicians to pay much attention to clinical behavior of this disease. To a large extent the sole cry has been, "How should it be treated?" As the result of this attitude on the part of the general practitioner and an unfortunate lack of real interest upon the part of most urologists there has eventuated a decided shortage of men sufficiently versed in the entire subject of gonorrhea to furnish us with the teachers that are sorely needed for the education of the public and the medical profession as well. This shortage of qualified teachers who can discuss all phases of gonorrhea is being particularly felt at the present time when vast numbers of our young men are entering the various protective services of

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the government. The strain that this shortage has thrown upon those few who have not made a one-sided approach in their understanding of gonorrhea and who have had the courage to openly espouse the battle is far greater than is generally recognized. It is a condition crying for immediate correction.

**Lest someone suspect that the statement that our profession has not kept pace with modern thought concerning the clinical aspects of this disease is unfounded, consideration might be directed to what justly can be called the "sulfanilamide fiasco" and the therapeutic confusion that has followed. The production of this confusion, sad to state, must be laid at the door of our urologists. For it was they who carried out the early clinical trials upon sulfanilamide and wrote such glowing stories about the results they thought they obtained. They told us that this drug produced for them anywhere from 50 to 95 per cent of cures in ambulatory patients. We, and they, now know that this is not the case and that one must be generous to a most unscientific fault to attribute to this particular drug as high as a 30 per cent *apparent cure* rate.**

The analytic mind naturally wonders how supposed specialists upon this disease could have misled themselves and others so greatly. And when one delves into the real reason for it all he is sure to find that a poor understanding of the true clinical course under varying conditions and in various individuals was the main reason. In other words, these investigators entirely lost sight of the time element in a disease that eventually gets well of itself in most well-behaved males. They failed to recognize that patients who harbored the gonococcus after a few weeks of sulfanilamide medication and eventually got well, did so because it was in them to muster up the required immunity responses spontaneously or as the result of the stimulating effects of concurrently used local treatment and not because they had been consuming sulfanilamide. Erroneously they included in their reported figures drug cures, local treatment cures and even time-element cures and the figures looked fine. Only those who really knew gonorrhea failed to be fooled into making such interpretations. Those who investigated the action of sulfanilamide in pneumonia made no such mistakes.

**The memory of this unfortunate experience should teach us much. At least, it should show us that he who knows little or nothing about the disease itself is rather poorly equipped to evaluate treatment methods or to carry them out. It should convince us that the time is here when every physician who treats gonorrhea should get his mind off of the sole question of treatment long enough to familiarize himself with the clinical aspects of the disease he is treating. Public safety demands it and professional reputation urges just as strongly the wisdom of such a move.**

And, as we are overcoming this deficiency, we might do well to stimulate in ourselves a degree of social vision that leads us to see in every patient with the disease not only someone who needs treatment but an individual from whom Society must be protected until we have excellent reason to believe that the disease has been cured. Also, we owe it to humankind to realize that our patients acquired the disease from others and that, unless we make a real effort to see that these disease sources are placed under treatment, we are doing rather a poor job in public health.

In view of the fact that every State Department of Health has been instructed by the United States Public Health Service, from whom funds are being allotted for the venereal disease control program, that a part of these funds must be used for the control of gonorrhea, we might do well as a profession to realize that the fight at last is on. Standing, as we do, at the intersection of all such endeavors, we also must realize that a large part of such work falls upon our shoulders.

**Not only must we prepare ourselves but we have just as an important part to play in public education. No one can do this as we can and one only has to study the results of recent surveys as to where young men advised inquirers to go for treatment to discover that we do not stand so high in their estimation as should be the case.† For most of them**

†See Venereal Disease Information, January, 1940.

**advised that the supposed sufferers go to a drug store. Fewer of them suggested a clinic, while the private physician came in as rather a poor third. Of course, these inquiries were not made among the most intelligent of our citizens, but gonorrhea is far more prevalent among those who were asked than it is among the better educated.**

However, our supposed intelligentsia do not always seek sexual relief among their more intelligent sisters. So the gonococcus goes back and forth between all so-called strata of society and neither is protected unless all are included.

As a profession we might do well to realize that Congress was moved to make the appropriation of funds for the control of the so-called venereal diseases largely by what it was told about the ravages of syphilis among what we have come to call that "great underprivileged third" of our population. It was not greatly concerned about those who were reputed to wear "white collars." Such being the case, we might do well to analyze at least one of the ideas rather widely held about those to whom Congress extended its sympathy. In doing this let us stick solely to the question of gonorrhea, for it is possible that one cannot make such positive statements about those of our poor and near-poor so far as syphilis is concerned. In these days of limited medical incomes it is only natural that the question of the abuse of free and small-pay dispensaries should receive attention. And one commonly hears criticism raised about the question. Even casual questioning of those who attend such dispensaries for the treatment of gonorrhea will show that there is so little such abuse that it can be completely disregarded. There is no disease about which men are more secretive, and those who possibly could pay for private treatment do not frequent such dispensaries—they go to either the druggist or the physician's office. Upon a number of occasions the writer has had such an investigation carried out in his dispensary and about the only times patients were found who could pay for treatment, they had been sent to the dispensary by physicians. In brief, this field of endeavor entails no economic loss to our profession and we would do best to forget economic outlook in this regard, rejoice over the fact that these people can have treatment placed within their financial reach and do all we can to encourage those who run them and those who must attend. Indeed, if we are really interested in control, we might encourage them to go there instead of to the druggist, for it has been shown by a recent nation-wide survey that only 7 per cent of our druggists refuse to make a diagnosis, treat or sell remedies for gonorrhea.

## Treatment

So much for these highly important things that are hampering success in the control of gonorrhea. Let us now consider where we stand on the matter of treatment itself. Recent advances have placed us in a decidedly attractive position in this regard. Out of the welter of therapeutic confusion has emerged a set of conditions that lend themselves well to the laying down of a number of rules and near-rules that should do much to clear the atmosphere and which, if constantly borne in mind, will make it possible for us to eradicate more gonorrhea in the next few years than has been done in any fifty years of the world's history. True, we have not reached the point of therapeutic perfection, but we have in our hands today chemotherapeutic agents that surpass in value anything the most optimistic of us ever expected to possess and it is more than possible that there are better things yet to come.

To date there are three widely used sulfonamide drugs on sale for the treatment of gonorrhea—sulfanilamide, sulfapyridine and sulfathiazole. And it might be well to discuss them briefly in this order in the light of our present knowledge to the end that we get the most out of them with the least harm to our patients.

*Sulfanilamide.*—This drug does one of three things for and to patients with gonorrhea, viz.: (1) it cures some, (2) it makes symptomless carriers of some and (3) it fails to have any influence whatever on others. Its apparent cure rate is so low in comparison with the other two sulfonamide drugs that many careful clinicians are convinced that we would do best if we stopped using it for this disease. This cure rate in ambulatory patients is not above 30 per cent and the rest are failures. Its toxicity rate is at least 50 per cent.

*Sulfapyridine.*—This compound, dose for dose, is about as toxic as sulfanilamide. Its apparent cure rate is from two and a half to three times greater and it has an attractively low carrier rate.

*Sulfathiazole.*—Unquestionably this is the better drug of the three in the treatment of gonorrhea owing to its far lower toxicity rate. Its therapeutic value is in every way equal to that of sulfapyridine.

Before enumerating our rules and near-rules it is appropriate to spend a little time on that highly important question of carriers. Such individuals, though they still harbor the gonococcus and can transmit it to others, have absolutely no symptoms to suggest its presence. They usually can indulge in all of those things so potent in the production of symptoms in latent cases in the old presulfonamide days, without the slightest return of symptoms. When they transmit the disease to others most, if not all of their victims, become totally asymptomatic carriers. They have not the slightest reason to suspect thay have been infected, though careful microscopic or cultural studies will reveal the presence of the gonococcus. When these secondarily infected individuals transmit their infections to a third party he is left in no doubt about the matter of infection—he has a frank attack of the disease. Socially, these primary and secondary carriers are our greatest present-day therapeutic concern. Our further interest in the really cured ceases, we are not fooled by those who fail of any benefit, but we can be unmercifully deceived by those who still have the disease and, yet, present no clinical evidences of it. The difficulty in the pronouncement of cure is now our chief concern in all but the definite drug failures who must be treated by those methods in vogue before we had these drugs. For some few carriers escape detection despite the most careful tests for cure which include repeated microscopic and cultural studies.

1. High blood concentration of the sulfonamide drugs is not needed in the treatment of urogenital gonorrhea—some of the greatest successes have been in patients in whom this went no higher than 1.5 mgm. per 100 c.c. of blood and some of the most signal failures occurred where it reached 15.0 mgm.

2. If sulfonamide drugs are acting favorably, the patient should be entirely symptom-free by the end of the fifth day. If this has not occurred he can be classed as a definite drug failure and medication with that particular sulfonamide should be discontinued.

3. Such patients should, after a few days' rest, be placed on another sulfonamide and, failing of benefit from it, should be placed on local treatment.

4. Sulfanilamide failures rather commonly are favorably influenced by the other two drugs but the reverse is not the case. Sulfathiazole, not uncommonly acts favorably in sulfapyridine failures.

5. Present custom is to discontinue the sulfonamides after a week or ten days. There is nothing to suggest that longer medication is needed or is of value.

6. There are many useful schemes of dosage none of which aim at high blood concentration. The following have been employed by different careful clinicians with about equal curative results.

| Days | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Grams | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| Grams | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Grams | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

7. In these dosages and shortened periods of administration the toxic factors are at a low ebb and with sulfathiazole they are almost nil.

8. This lower dosage for such short periods is in marked contrast to our first efforts with sulfanilamide. It greatly reduces the expense of treatment for the patient and does much to place it within the reach of the poorer of our citizens despite the higher cost of the better drugs.

9. Despite this lower and shorter dosage the toxic factors are of sufficient importance to urge that these drugs should not be given to patients who cannot be seen by the physician at 48- or 72-hour intervals at most.

10. In those seemingly cured our older tests of cure are of little value. They should be studied repeatedly for some weeks following seeming cure. Even then they should be instructed not to indulge in unprotected sexual intercourse for at least two months.

11. It was shown by the studies of the Cooperative Clinical Group* that, as a criterion of

*Jour. A.M.A. 115; (November 9) 1940.

cure, a persistently clear urine for two weeks or longer was of little value. At least one out of every three sulfanilamide cases in this category is still infected. If the most careful microscopic studies are carried out in such cases this margin of error falls to one out of twenty who escape detection. If to these criteria are added careful cultural studies only one out of a hundred carriers will escape detection.

12. By the use of better drugs it is obvious that we have it in our power to eradicate quickly most gonococcal infections, if we can keep our patients under treatment for the required length of time. Not only should we see that this is done, but we should insist upon a much longer observation period after seeming cure than has been general. In no other way can we reap the full measure of success and protect others from that unfortunate carrier-state, the real frequency of which, no one knows.

# Primary Tuberculous Infection In the Adult

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■ The first contact of the tubercle bacillus with the tissue of the body of a susceptible animal is remarkably constant in spite of many variable factors. The uniformity of primary tuberculous infections was first observed by Parrot in 1876, many years before the tubercle bacillus was known. The same phenomenon was reaffirmed experimentally by Baumgarten, Cohnheim, and Cornet, and in human disease by Küss, H. Albrecht, E. Albrecht, Ghon, Ranke, and many others more recently. Parrot's first observations were formulated into a law known as the law of "similar adenopathies" by virtue of the fact that the lymph nodes leading out from the point of inoculation towards the blood stream were enlarged in orderly sequence and in the same manner. The infection was clearly not alone one of the local tissues but also one of the lymphatic apparatus leading away from the focus of the origin. The disease was henceforth to be viewed in the light of most other infections. It consisted in a local tissue reaction followed by a progression from one lymph node to another and terminating in a septicemia when the infection reached the blood stream. Although this systemic character of the disease was recognized by most of the workers mentioned, Ranke[9] formulated the hematogenous phase into his second stage. In all he viewed tuberculosis as a disease of four stages corresponding to what he considered the principal episodes of the disease. These stages are as follows: First, the local process with the corresponding lymph node involvement—the *primary complex;* second, the immediate hematogenous dissemination; third, later hematogenous disseminations with beginning organ localization; and fourth, organ isolated foci. The last two stages are usually accepted as parts of the third stage, as originally designated by Ranke. Corresponding to the morphological stages he proposed an equal number of stages of allergy or hypersensitiveness of the body cells to tuberculo-toxin. Others have carried this schematic effect to an extreme of doubtful merit when six stages of anergy and allergy are described.[5]

Most conservative workers have felt that Ranke and his school have been too theoretical for practical purposes, and prefer to adhere to the more conservative work of Parrot, Küss, and Ghon.

**Irrespective of different interpretations, the following facts are generally agreed upon by the majority of workers. The infection begins as a local bronchopneumonia, and the lymph nodes in anatomical relation are soon involved. This is followed by a hematogenous dissemination to the lungs and then to the whole**

*From the Research Laboratories of the City of Chicago Municipal Tuberculosis Sanitarium.

**system. Later these systemic foci may develop into disease of the respective organs. The lesions may spread into advanced disease or may become encapsulated, calcified and later resorbed.**

**It is a notable fact, however, that practically all the conceptions of primary tuberculous infections have been founded upon the observation made in children. Practically nothing has been contributed for primary infections in the adult.**

The principal reason for this lapse seems to be an oversight rather than a lack of observation. Blumenberg[1] was one of the first to point out what appeared to be a discrepancy in the classical type of primary lesion in adults. Similar phenomena appeared to me[14] entirely without knowledge of Blumenberg's work. The observations of Soper and Amberson,[12] Myers,[6] Stiehm,[13] annd other clinicians support the hypothesis that many primary infections take place in the adult, although all adult lesions appearing as the tuberculin reaction turns positive, correctly have not been accepted as primary. The turning positive of the tuberculin reaction at about the time the lesions appear, does not rule out an earlier extinct infection.

The important feature is that pathologically there are rarely found any older lesions than the ones appearing with the positive tuberculin reaction. Although very small lesions may have been overlooked or have become resorbed, the fact that no older calcifications are found justifies the assumption that the cases are to be classed as essentially primary infections.

Since there has been so little written on primary tuberculous infection in the adult, an inquiry into the subject will be pertinent. Surely in the thousands of necropsies over the last sixty years many should have been on adult patients with a first infection. This is especially true in the last two decades. A glance at table I will show the reasons for this assumption. Even sixteen years ago Slater[11] found only about 10 per cent of rural children in Minnesota to be infected by high school age—a rate below 1 per cent a year. Chadwick and Zacks[3] found the infection rate to be 1.5 per cent a year for Boston, which is a fairly representative large city. Detroit, Chicago, and Minneapolis have been found to have similar rates of infection. At a 1.5 per cent rate there are only approximately 90 per cent infected by sixty years of age. Assuming that the rate is constant, there would be only 30 per cent by twenty years of age, leaving 60 per cent in adult life, with 10 per cent escaping infection altogether.

**Tuberculin surveys in Chicago as well as elsewhere reveal an average of only about 30 per cent infection by the end of high school life. If these calculations are even only approximately correct, we are forced to the startling conclusion that over half of the infections in many civilized communities today take place in adult life, and that most of the cases appearing in patients whose tuberculin test turns positive with the appearance of the lesions, are primary infections.**

TABLE I. HYPOTHETICAL SHIFT FROM YOUNGER TO OLDER AGE GROUPS AS THE INFECTION RATE INCREASES

| Infection Rate per Year | Years | Per cent Infected in Childhood | Per cent Infected in Adult Life |
|---|---|---|---|
| 8%—100% by | 12.5 | 100 | 0 |
| 5%—100% by | 20 | 70 | 30 |
| 3%—100% by | 33 | 42 | 58 |
| 2%—100% by | 50 | 28 | 72 |
| 1.5%— 91% by | 60 | 21 | 70 |
| 1.0%— 60% by | 60 | 14 | 46 |

A logical query that follows is why do not more pathologists report the observation? The principal reason appears to be that pathologists are not justified in recognizing any primary lesion as such that is not a classical *primary complex.* Pathological criteria must be largely on the basis of morphology. But are there not circumstances that may alter the classical picture of Parrot, Ghon and Ranke?

In order to investigate the problem a special study has been made of our postmortem material. All the cases have been chosen in which there was a definite single contact history with the age character of the lesions corroborating the contact. Lesions were chosen which were the oldest calcified lesions found in the body after a careful search with the x-ray. The

TABLE II. CHANGES IN "VOLUME" IN CUBIC MILLIMETERS IN THE COMPONENTS OF PRIMARY LESIONS AS AGE ADVANCED IN A SERIES OF KNOWN SEVERE CONTACTS

| Age Period | Number of Cases | Average Volume Parenchymal Lesions | Average Volume Bronchial Node Lesions | Average Volume Tracheal-Bronchial and Tracheal Lesions | Total Lymph Node Lesions |
|---|---|---|---|---|---|
| 0– 5 | 11 | 210 | 450 | 1,350 | 1,800 |
| 6–10 | 9 | 87 | 555 | 805 | 1,360 |
| 11–15 | 9 | 31 | 92 | 137 | 229 |
| 16–20 | 10 | 33 | 73 | 12 | 85 |
| 20+ | 5 | 9 | 16 | 6 | 22 |

cases were then divided into 5-year age periods and the calcified lesions of the parenchyma and the lymph nodes, respectively, were measured on the postmortem x-rays, averaged for each group, and tabulated in table II. A glance at Table II reveals that there is a gradually decreasing size of the lymh node complex as the patient approaches adult life. Many of the lesions in adults would be overlooked entirely without postmortem x-rays and a painstaking search. Many adults do not have lymph node involvement at all. In addition there is prone to be smaller parenchymal lesions in the fatal cases. The exceptions to this were in Negroes whose disease approached more that of the childhood type, as shown by Opie[8] and others.

Another observation was that the lesions of adults predominated in the upper parts of the lungs. On microscopical study it was also noteworthy in a large number of cases that the capsules were not well developed and that calcification was slower in forming. Finally, in Table III is shown a tendency for the disease to run a more rapid course in patients dying after 15 years of age after the first infection evolves into active disease. If all fatal cases are counted and not just those dying after 15 years of age, this difference may be only less or even may not exist at all. It does show, however, that the greater number of adult lesions that progress do so rapidly and the critical period is in the young adult in which most fatalities are found.

To illustrate these various forms, several cases have been selected and will be reported briefly, beginning with the lesions wherein the lymph node components are typical, although usually smaller than the parenchymal foci and proceeding to the cases that are more atypical.

*Case 1.*—M. I. (A866) was eighteen years old at death, and was exposed to his father about a year earlier. There was a small typical primary lesion in the right base that followed the lymph nodes to the hilum and across to the left superior tracheobronchials. They ranged from 2 to 5 mm. in diameter. One of the superior tracheobronchial nodes ruptured through the mediastinum into the left upper lung lobe leading to a terminal tuberculous bronchopneumonia. The lesions were small, soft and of the classical type, but there was no preponderance of either. They were of a one and a half year type.

*Case 2.*—L. S. (A544) was a twenty-nine-year-old nurse on whom a calcified lesion appeared on the x-ray about six years before death. A parenchymal extension appeared around the calcified lesion five years before death, and a diagnosis of tuberculosis was made. The disease progressed to death, and at the autopsy a typical primary complex was found, but there was no extension beyond the bronchopulmonary nodes near the hilum. The size of the parenchymal lesion was about 5 mm. and the three bronchopulmonary nodes from 3 to 7 mm. in diameter. The age character of the lesions was of a six-year type.

*Case 3.*—H. E. H. (A1140) was an American male, thirty-seven years old at the time of his death. The onset of his disease was in 1930. He was admitted to the sanitarium on three occasions and died in 1938 of pulmonary tuberculosis. There was a fibroid cavity in the left upper and a small soft-walled one in the lingula which produced a bronchopleural fistula and empyema. There were a few parenchymal calcifications in the right upper lobe and in both bases. A huge calcification was found in the right paratracheal nodes, a soft calcified mass in the liver, with several satelite colonies, and about a dozen 2 to 3 mm. tubercles in the spleen. The age character was estimated as of an eight-year type.

*Case 4.*—L. C. (A1197) was a twenty-four-year-old female at death. There was a rather large primary complex in the right upper lung lobe (5 mm.), a larger one in the bronchopulmonary nodes (7 mm.), and

TABLE III. COMPARISON OF THE DURATION OF THE CLINICAL DISEASE AND LATENT PERIOD IN VARIOUS AGE GROUPS OF A SERIES OF SEVERE CONTACTS DYING AFTER 15 YEARS OF AGE

| Age Limits of Infection (years) | Number | Average Years of Clinical Disease | Average Years of Latent Period | Total Disease Period | Average Age at Death |
|---|---|---|---|---|---|
| 1– 5 | 14 | 6.1 | 18.5 | 24.6 | 27.1 |
| 6–10 | 18 | 3.4 | 12.6 | 16.0 | 23.5 |
| 11–15 | 23 | 2.8 | 7.8 | 10.6 | 23.1 |
| 16–20 | 14 | 2.1 | 5.9 | 8.0 | 25.5 |
| 20–26 | 9 | 4.0 | 3.5 | 7.5 | 30.0 |
| Grand Average | 78 | 3.5 | 10.0 | 13.5 | 25.8 |

one still larger (10 mm.) in the hilum nodes. There was a hematogenous spread to the spleen. The lesions were from three to six years old in appearance.

*Case 5.*—M. S. (A1302) was a twenty-six-year-old Negro woman born in Mississippi and came to Chicago when she was twenty-one years old. She did housework before and after marriage. She has had two miscarriages.

The onset of her disease was influenzal in August, 1939, and death occurred in May, 1940. Her cough, volume of sputum and fever increased until death. At the autopsy many small recent (3-4 year) lesions were found in the lung parenchyma with evidence of "overflow" into large infiltrates which ulcerated and led to extension of her disease. There were lymph node lesions around the hilum measuring 3 to 4 mm. in diameter. They were slightly larger than the parenchymal lesions but still smaller than are usually found in children. Some of these lesions also revealed a tendency to overflow the original boundaries.

This patient was apparently infected soon after coming to Chicago, the lesions then progressed for two or three years without noticeable symptoms and on to clinical symptoms nine months before death.

*Case 6.*—G. C. (A873) was a thirty-year-old white woman at death, which resulted from an ordinary pulmonary tuberculosis. At the autopsy there was a dry caseous lesion at the hilum lymph nodes of a three to four-year type. In "anatomical relation" towards the right subapical region was a cavity with many massive infiltrates in the tissues around. A few nodular foci were also seen in the left apex.. There were no other calcified lesions in the body. The process was presumptively a massive and continuous primary lesion in an adult, with an overflowing parenchymal lesion having a small lymph node component at the hilum.

*Case 7.*—J. M. (A358) was a twenty-six-year-old nurse whose infection was traced to a period near or during the time of her training course. The disease began as several small parenchymal foci with a continuation of the process in the lymph nodes. The lesions ranged in size from 3 to 5 mm. in diameter. The clinical process was first observed as a cluster of cavities in the apex of the right lower lobe and extended to the base before death. The lesions were of a six-year type.

*Case 8.*—S. K. (A652) was a twenty-nine-year-old white woman who was exposed to her sister seven years before her own death. There was a "miniature primary complex" in the right upper and a paratracheal lymph node in anatomical relation to the oldest fibroid lesions. The lesions were about 3 mm. in diameter and did not reach the hilum at all. The process was of an eight-year type and presumed to be continuous from the primary.

*Case 9.*—E. O. (A509) was a thirty-four-year-old housewife whose clinical disease came on after a strenuous European trip, five years before death. There were many parenchymal lesions from three to six mm. in diameter. The lymph node lesions were small and did not reach the hilum nodes at all. The age of the lesions coincided with the illness following the European trip.

In many instances the lymph node lesions are not present or are very small. Two cases will be cited.

*Case 10.*—B. L. (A309) was a twenty-six-year-old teacher whose infection was probably acquired after coming to Chicago from Minnesota three years before death. There was an "abortive" type of primary lesion with many small parenchymal lesions, many large infiltrates, and only one one-mm. lymph node lesion in the bronchopulmonary nodes. They were less than three year old.

*Case 11.*—E. B. (A574) was a twenty-eight-year-old female who was exposed to her sister eight years before her own death. There was only a parenchymal component of the primary of an age character com-

patible with her exposure. No lymph node lesions were present at all. The lesions were compatible in character with the exposure.

In attempting to offer any explanation for the atypical nature of primary lesions in adults, the question first arises, wherein does the adult differ from the child? First, there is the anatomic change in lymphoid tissue which develops during the childhood age and atrophies towards old age. Both of these features would tend to cause a localization of the bacilli at or near the site of inoculation as age advances. In addition, there is the possibility of a "non-specific resistance" that would tend to prevent the bacilli from going far from the first focus. Although it must be admitted that such an idea is speculative, it is within the realm of possibility that age itself, non-specific immune bodies both humoral and cellular, and other factors, may assist in the process of localization of bacilli. While these theories may assist in explaining why bacilli are kept from spreading by lymphatics, it does not hold that tubercles may not spread directly by an overflow. In fact, highly virulent bacilli will frequently spread rapidly, particularly in young adults, into a fulminating disease. Such rapid spread may well be abetted by a slower growth of connective tissue as the patient becomes older.

DuNüoy,[4] experimenting on the healing of war wounds, showed that wound healing follows a definite curve from infancy to old age. A child's wounds will heal six times as fast as a similar wound in an old person. While no proof is extant that shows that tubercles vary to the same degree as wounds, there is evidence that during the early phases of tubercle formation the healing process is generally slower in adult tubercles. The capsules are frequently thinner, and as a result calcification progresses more slowly, especially during the first few years. For the same reason, virulent bacilli may spread more rapidly and lead to progressive disease. Thus the supposed better resistance of the adult may be off-set by a slower developing capsule. The significant feature is that the healing mechanism only gains momentum after the bacilli have begun to disappear. During their greatest growth activity the capsule is most vulnerable, and this fact may account for the rapid progression in certain adult infections.

After all the caseous and calcified "primary complexes" have been taken into consideration, it apparently still leaves a large number of infections in which no earlier infection could be found either pathologically or by an x-ray study of all the common portals of entry. There are many lesions that have no calcifications at all or the tubercle are not characteristic of primary lesions. There are so many of these lesions and they have corresponded so closely to the histories of infection in the respective cases that there is a strong suspicion that the parenchymal disease has been too rapid to leave behind any typical lesions.

A few illustrations will be offered.

*Case 12.*—C. K. (A390) was a twenty-four-year-old female exposed to a sister two and a half years before death. The lesions were quite atypical. There was a rapid "overflow" of subpleural lesions into large infiltrates which excavated and produced a "juvenile type" of disease. Only the bronchopulmonary lymph nodes were involved in the primary complex. The lymphatic process was found only by careful study. There were no calcified lesions found elsewhere in the body.

*Case 13.*—G. S. (A424) was an eighteen-year-old girl. She developed symptoms in March and died in October of a fulminating infection largely confined to the lung parenchyma. The lesions looked even less like primary lesions than the preceding case. No other older lesions were found.

*Case 14.*—E. J. (A752) was a twenty-three-year-old male at death. He was exposed to a tuberculous sister seven years before. There was a total excavation of the left lung. A small tell-tale lymph node at the hilum gave the only clue to the primary nature and age of the process. It perhaps began as an overwhelming pneumonic process.

*Case 15.*—J. L. (A639) was a similar case in a twenty-five-year-old housewife, except that only part of the lung was excavated. In the remaining parts of the lower there were many calcified caseous foci of four- to five-year age characteristics which coincided with a "pneumonia" of that same lung lobe five years before her death.

These cases illustrate the pneumonic character of certain tuberculous lesions, some becoming rapidly fatal, others slowly progressive. None of them are typical primary lesions, although it is strongly suggested that the infections were the first in the body.

The cases just cited are not uncommon. If there is anything unusual it is that the primary characteristics of most of them are overlooked. The same phenomenon occurs in infants and children, but in the latter there is usually a definite "lymph node complex" and the age of the child practically precludes any former infection. In adults they are nearly all accepted as "reinfection," because the clinical criteria does not justify any other conclusion. When postmortem x-ray search and gross and pathological studies fail to reveal any older lesions, however, the question of the primary nature is raised. When a history of contact or a clinical episode corresponds to the character of the lesion, or if the tuberculin test has recently turned positive, it makes the primary nature of the condition more probable.

The cause of this type is not difficult to find if the observations of heavy dosage or high virulence is taken into consideration. When the dosage is large, as shown by Sewell[10] in animals, there may be a massive involvement with primary necrois. The process is usually so rapid that lymph node involvement may be slight or lacking.

There are no doubt other rare types such as those caused by atypical microörganisms, bovine bacilli, or those changed by diabetes or silicosis; but enough has been given to show that primary lesions in adults of urban life and habits differ considerably from those found in children. In more primitive people, however, as shown by Opie[7] the lesions in adults are not greatly unlike those found in children. Occasionally such lesions are found in Chicago, but the percentage is usually small and most of the lesions seem to be of a progressive lymph node type usually associated with a variation in the type of microörganism.

One case of a progressive lymph node type will be presented.

*Case 16.*—B. M. (A1010) was a thirty-year-old woman whose disease began seven years before death. There is no history of contact, but the oldest lesions seemed to show about an eight-year process. It was perhaps two or three years older. From these oldest lesions there was a continuous overflow into the lymphatics producing varying ages of hyperplastic lymph node tuberculosis in the hilum region. Finally a break through into the parenchyma progressed to a fatal ending.

## Discussion

Although the divergent features of adult primary tuberculosis would be of great academic interest alone, they also possess a greater practical value for the clinician. First of all, the lesions are frequently small and insignificant and are prone to be overlooked by the clinician as of little consequence. No doubt many—yes, the preponderant majority—heal uneventfully, but enough become malignant that it demands conservatism in handling any of them. The worst feature of all is the rapid progress of the lesions when they get out of the bounds of the primary localization. Even worse is the difficulty of keeping the lesions under control or stopping the process. Chadwick[2] has clearly shown the malignant nature of puberty or young adult lesions and the difficulty of controlling them when they become clinically active. It would seem that these facts help to explain the course of heavy mortality in young adult life, so long known but always enigmatic. The reasons for the sudden exacerbations of the lesions in adult life are, perhaps, first a lack of immunity that is usually present in those having had a small infection in childhood or having carried one from childhood; second, a failure of the natural defensive factors to kill the parasites; third, a relatively slower development of the encapsulating mechanism so well developed in the young, and lastly perhaps the effect of rapid growth and change of metabolic and endocrine development that has just preceded maturity.

**In view of the observations reported, it would seem advisable to be scrupulously careful with any definitely demonstrable lesion in young adults irrespective of the size. The only question of importance is to establish beyond question the tuberculous nature of any lesion. The problem is not whether the lesions are large or small. If any lesion appears, its malignant tendency should be suspected. We should, of course, avoid a campaign of over-diagnosis, but when the lesions' nature is definitely established it should be viewed more as we view the presence of typhoid or diphtheria bacilli.**

The question then arises, what *is* the method of treatment? Naturally, it will not be possible to intercept every lesion in its barely visible

stage, and if they are intercepted many will disappear or heal uneventfully without the need of any treatment. The one precept to be followed is that the presence of a recent lung lesion of any visible proportions is to be watched; more particularly, if the tuberculin test has turned positive at about the same time. These facts should be kept in mind by the physician, and it may expedite a diagnosis when clinical symptoms appear, and thus the disease may be apprehended in its early stages. The condition should be explained to the patient and the lesion may be followed to great advantage by serial x-rays taken every two or three months until it has passed the "soft shell stage" of the first two years. If the lesion is going to show any signs of spreading, it will unsually do so by that time, either as a near or distant parenchymal infiltrate or as bronchial or lymph node phenomena. In addition, the patient should be advised to keep his routine activities within bounds. If another disease is superimposed, the convalescent period should be extended longer than normal. This is especially true following labor in women. There need be no application of blue laws, but an adherence to "moderation in all things" may prevent the spark of infection from reaching the conflagration of disease.

## Summary

In studying the character of primary infections in adults, it has been noticed that as a rule they differ from the first infection of childhood. There is a tendency for the lesions to become confined more to the lung parenchyma, resulting in a smaller or a total absence of lymph node components. This may result from the changing character of the lymphatic anatomy as age advances. There is an enrichment of growth of lymphoid tissue in children and later a gradual atrophy as old age is approached.

There may be a slowly developing non-specific resistance due to repeated infections as life advances.

There is also a slower development of the capsule of the tubercle in adults, which is reflected in a thinner capsule, less calcification, and perhaps a tendency to break more easily and spread more rapidly. Naturally this tendency must be off-set by other factors of resistance, because there are, without much question, as many or more primary lesions that heal in adults as there are in children.

The features of value to the clinician are that rarely can adult primary lesions be distinguished clinically from reinfection. Because of this masking of the lesions, and the fact that the process is frequently of a malignant type, it is well not to neglect adult primary tuberculosis, irrespective of the size of the lesions. A more vigilant attitude may help to apprehend the disease before it really gets under way and will result in the treatment of more minimals and less far advanced cases, and consequently will result in fewer fatalities and the return of more patients to the rôle of useful citizens.

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In answer to the question: "Must students contract tuberculosis while in college?" the author answers: "No, because we have at our command accurate methods of screening out contagious cases of tuberculosis in any group. Therefore, if we keep students under sufficiently close observation, it is with great rarity that one will enter with contagious disease or will develop it on the campus so as to disseminate it to other students. Thus, the students may be prevented from contracting tuberculosis from one another . . . It is true that the occasional student will become infected through contact with a contagious case entirely apart from the campus. However, in most parts of this country such infections have been reduced to one per cent or less per year. Therefore, few students become infected even in this manner while they are in college." *—Tuberculosis in Students by J. Arthur Myers, M.D., Amer. Rev. of Tuber., Feb. 1940.*

# Cyanosis of the Newborn*

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The appearance of cyanosis depends on the presence in the peripheral circulation of sufficient unoxygenated hemoglobin (reduced) to impart a bluish color to the skin and mucous membranes. In the normal adult about one-third of the blood must be unsaturated with oxygen before cyanosis appears. Four factors have been defined by Lundsgaard as affecting the development of cyanosis.[7] (1) In the first place stands the hemoglobin content of the blood. Since the appearance of cyanosis is dependent on the actual quantity rather than on the percentage of reduced hemoglobin in the peripheral circulation, it is possible for a patient with a very high hemoglobin level to be cyanotic and still to have enough oxygenated hemoglobin present in the circulation to prevent anoxia to the tissues. On the contrary, a patient with a low hemoglobin content in the blood may be suffering from definite anoxia to the tissues, but the amount of reduced hemoglobin in the circulation may be so low as not to cause the appearance of cyanosis.

Only in the presence of hemoglobin levels adequate to permit the development of cyanosis may the other three factors be operative, viz.: (2) degree of oxygen unsaturation of arterial blood coming from aerated lungs—affected by oxygen tension in the air, rate and depth of respiration, permeability of the alveolar walls, and partial obstruction of the bronchial tree; (3) proportion of blood passing from right to left side of the heart through unaerated channels—affected by congenital malformations of the heart, atelectasis and pneumonia; (4) oxygen consumption in the capillaries—influenced by peripheral vascular factors.

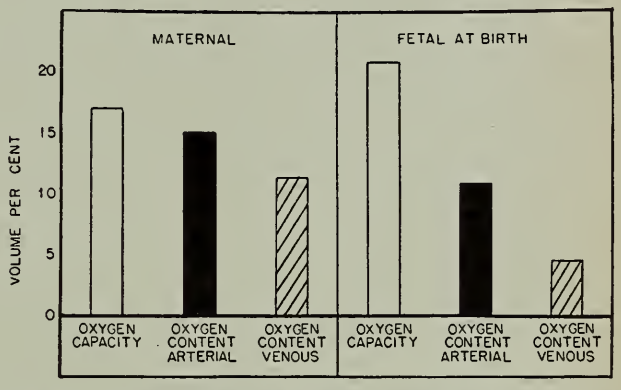


Fig. 1. Normal oxygen relations of maternal and fetal bloods. This figure shows the average oxygen relations of blood in fifteen normal mothers and fifteen unanesthetized infants at birth.

An individual living in an environment of reduced oxygen tension tends to compensate by the development of a higher red cell count and a higher hemoglobin in the blood. It is doubtful if this compensation extends to a greater degree than the lowered level of oxygen tension in the environment requires. Two examples of such individuals are the persons living at a high altitude and the fetus in utero. The added stress to the aviator going to unaccustomed high altitudes and the reduction in oxygen supply of the fetus during the birth process have both the feature in common of a temporary anoxia. While the pilot is supplied with extra oxygen, all too frequently the infant's insufficient supply is still further reduced by obstetrical procedures designed to hasten delivery or to alleviate pain in the mother.

The comparative oxygen capacities and degrees of unsaturation of both arterial and venous blood of the maternal and fetal circulations are shown in Figure 1 (Eastman).[4] It is to be noted that fetal blood has a compensatory increase in total hemoglobin associated with a degree of oxygen unsaturation comparable to or slightly less than that of maternal venous blood.

*From the Department of Pediatrics and Communicable Diseases, University of Michigan Medical School. Read before the Seventy-Fifth Annual Meeting of the Michigan State Medical Society, Detroit, September 25, 1940.

Thus *in utero* the fetus may have a physiologic cyanosis. After birth, the larger amounts of hemoglobin are no longer needed and blood destruction occurs with accompanying physiologic jaundice (Table I).

TABLE I.—CYANOSIS OF THE NEWBORN

*Proximal Cause:* Oxygen Unsaturation of the Blood Due to Inadequate Respiratory Exchange.

*Underlying Causes:*

(1) Cerebral Disturbances
- Traumatic
- Asphyxial
- Medication

(2) Pulmonary Disturbances
- Atelectasis
- Obstruction
- Pneumonia
- Edema
- Hemorrhage

(3) Circulatory Disturbances
- Congenital Cardiac Anomalies
- Peripheral Circulation

### Intra-uterine Asphyxia

While still *in utero,* the fetus, already reacting to low oxygen supplies, may be subjected to additional reduction in this necessary gas, which it cannot further compensate to meet. These further reductions in oxygen supply produce *intra-uterine asphyxia,* perhaps the most important cause of cyanosis persisting in the newborn. The causes of intra-uterine asphyxia may be grouped as follows: First, any condition which interferes with adequate oxygenation of the mother's blood—a rare cause of this would be pneumonia in the mother; an unfortunately common cause is prolonged anesthesia before and during delivery.

Secondly, any interference with circulation of the maternal blood through the placenta, e.g., as in premature separation of the placenta, infarcts of the placenta, or with tetanic contraction of the uterus, induced by pituitrin. Operative here also is reduction of area of attachment of placenta following the birth of a twin, sometimes adversely affecting the oxygen supply of the second twin.

Thirdly, any condition which impedes circulation through the umbilical cord such as prolapse or looping of the short cord about the neck of the baby.

It is obvious that many of these causes of intra-uterine asphyxia are unavoidable, yet all may produce the signs of fetal distress, namely, acceleration and later slowing or gross irregularity of the fetal heart with appearance of meconium in the amniotic fluid. Attempts to hasten delivery may give rise to the second large cause of persistent cyanosis in newborn babies, namely, *trauma* incident to labor and operative delivery. Trauma with gross cerebral hemorrhage occurs rarely during normal delivery of mature babies, but is an especial hazard in the delivery of the premature.

Cerebral hemorrhage attending birth trauma is usually gross and superficial from tears of vessels in the falx or tentorium, differing from the multiple smaller hemorrhages both superficial and deep which commonly follow severe asphyxia. Not only is the premature baby especially susceptible to trauma but asphyxial hemorrhages are also frequently found in the premature infant. Thus it seems that asphyxia or trauma of degrees innocuous to full-term normal infants may produce serious intracranial lesions in the premature baby. The influence of sedation and anesthesia as causes of asphyxia has been well brought out by Eastman,[5] Clifford,[2] Cole,[3] Smith,[8,9] and others.

Because it is frequently fetal distress which leads to operative interference or to efforts to hasten normal labor, asphyxia and trauma are often both present as contributory factors in the cerebral injury in the newborn, yet the pathologic changes, symptoms, sequelæ, and prognosis vary with the preponderance of the one or the other type of injury. With intra-uterine asphyxia, congestion, followed by edema, petechial hemorrhages, and in severe cases gross hemorrhages, occur. The damage to the brain in the asphyxiated patient seems to be due not to the hemorrhage but to the concomitant destruction of nerve tissue and damage to blood vessels, both traceable to the anoxia. Damage to the brain in cases of trauma seems secondary to the gross hemorrhage which occurs usually subdurally, in the subarachnoid space, or in the ventricles, producing irritation and pessure.

**The symptoms characteristic of intracranial injury are lassitude, vomiting, gross irregularity of respiration, cyanosis, and convulsions. From the standpoint of cyanosis, hemorrhage into or over the pons is most serious because the respiratory center in the brain stem may be immediately involved. A slowly accumulating gross hemorrhage over the cortex is**

**more likely to produce irritation characterized by convulsions with cyanosis a late sign developing only when intracranial pressure has risen. Pressure changes characterized by fullness or bulging of the fontanelle may be noted even with mild symptoms in patients with supratentorial hemorrhages, but with subtentorial hemorrhage, the condition of the infant may be grave—without evident pressure increase.**

Even with definite evidence of intracranial injury, lumbar puncture may be indicated only in the presence of advancing symptoms. A grossly bloody spinal fluid indicates traumatic hemorrhage, while blood-tinged or xanthochromic fluid indicates either mild subarachnoid or subdural hemorrhage. Edema may be manifest by pressure increase only.

The prognosis is dependent on the location and extent of the hemorrhage and brain damage. Large gross hemorrhages in the subarachnoid space seem to have a good prognosis unless in the region of the medulla. A gross hemorrhage in the subdural space tends to become cystic and gradually to increase in size, developing into a chronic subdural hematoma, with disastrous results later to the infant who does not have the accumulation of old blood removed, preferably by operation.[6] The prognosis of patients with asphyxial hemorrhage is often bad both as regards life and as regards neuromuscular and mental development, for the brain damage and vascular damage are parallel phenomena irreparable from birth. Inasmuch as therapy has very little to offer for this type of patient, prophylaxis would seem to be the only approach. A consideration of the mechanism of damage incurred leads to the conclusion that some form of extra oxygen administration to mothers undergoing prolonged or difficult labor would seem advisable.

The strikingly frequent occurrence of bleeding elsewhere in the body at two to five days of age in infants suffering from intracranial lesions, especially of the asphyxial type, has led to the consideration of a possible causal relationship of asphyxia to hemorrhagic disease of the newborn.[1] While such a relationship has not been definitely established, the administration by mouth of Vitamin K to all infants who have been born by difficult or prolonged labor—with even mild evidence of intracranial damage—would appear entirely justifiable.

### Pulmonary Causes

Pulmonary causes are next in importance to cerebral causes of cyanosis in the newborn.

Atelectasis—imperfect expansion of the lungs—is present in all infants during the first two or three days of life, and for even longer periods in premature infants. This is, however, a physiologic atelectasis which becomes of pathologic significance only if of unusual severity or duration, or in the immature infant where weakness of the chest musculature or framework exists. In very immature infants, there may be present areas of incompletely developed and consequently inexpansible lung tissue. Inexpansible areas may also be observed in the luetic infant.

**Another serious form of atelectasis is the socalled secondary or resorption type found in infants in whom after respiration is established obstruction in the bronchial tree occurs. Simple forms of this type may be prevented by thorough cleansing of the pharynx at birth; but a more dangerous variety is seen to develop following intra-uterine asphyxia, with deep inspiratory effects on the part of the fetus and aspiration into the smaller bronchioles and alveoli of amniotic sac contents. This material, composed of cornified epithelial cells and vernix caseosa, forms membranous linings to the alveoli and interferes with exchange of oxygen and carbon dioxide in the lungs.**

Other pulmonary causes of cyanosis are pulmonary hemorrhage, pneumonia or pulmonary edema. Pneumonia in the newborn may result from mouth-to-mouth resuscitation or from other exposure to infected individuals. Pulmonary hemorrhage may be part of hemorrhagic disease or a result of erythroblastosis fetalis, while pulmonary edema and congestion may follow the parenteral administration of excessive amounts of fluids to the newborn. If the lung is well developed anatomically, a pulmonary hemorrhage must be large or diffuse, a pulmonary edema must be extensive, or an atelectasis of considerable degree, usually secondary in type, must be present for the pulmonary condition to be the proximal cause in the production of cyanosis.

Congenital defects in the circulatory system

or collapse of the peripheral circulation may be responsible for cyanosis. Yet it is noteworthy that infants with severe cardiac anomalies may go for months or years before cyanosis becomes a symptom. Better criteria in the neonatal period for the diagnosis of congenital malformation of the heart are dyspnea, a persistently high red cell count, feeding difficulties, congenital defects elsewhere, and cardiac enlargement by x-ray. Murmurs, like cyanosis, may be absent.

### Summary

In newly-born infants, pulmonary causes such as obstruction of the air passages, atelectasis, or pneumonia account for many instances of cyanosis, while congenital defects of the heart account for a few. The outstanding cause of cyanosis in the newborn is an intracranial lesion due usually to intra-uterine asphyxia or to trauma to the infant's head during the birth process. Often both trauma and asphyxia are operative, inasmuch as asphyxia leads to symptoms of fetal distress which cause the obstetrician to hasten to deliver the infant, thereby inducing trauma. Asphyxia, characterized pathologically by engorgement, edema, petechial and in very severe cases gross hemorrhages in the brain tissue, may be caused by certain unavoidable obstetrical conditions, but at times seems definitely to result from the unwise selection of drugs for hastening labor or from deep anesthesia to the mother.

Prognosis in patients with cyanosis of the newly born as a result of trauma depends on the severity and extent of the cerebral injury and resultant hemorrhage. Gross hemorrhages in the subarachnoid space usually have a good prognosis. Subdural hemorrhages tend to become chronic subdural hematomas and often must be removed by operation. The prognosis of injury resulting from asphyxia is bad both as regards life and as regards mental and neuromuscular development. It is these patients who become the cerebral spastics and the mentally defective children. Prevention of the injury rather than treatment is necessary in this type of case.

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# Early Beginnings of Preventive Medicine in Michigan

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It is the honorable claim of the medical profession that the great advance in sanitary knowledge has been brought about mainly by its own members.

—David Inglis, M.D., 1886[1]

■ During the entire period, 1850-1888, the physicians of Michigan were always to be found in the van of the public health movement. "We claim to be the authors of Preventive Medicine or Hygiene which has, within the past fifty years, increased human life 30 per cent," said Dr. Geo. E. Ranney of Lansing in his presidential address before the Michigan Central Medical Society in 1873.[2] Before the establishment of the State Board of Health, the physicians of the state were its strongest advocates; after its creation they became its staunchest supporters. Matters of hygiene and sanitation occupied much of their time at meetings of the district and state medical society meetings.[2]

### The State Medical Society

The first state medical society was organized in accordance with a legislative Act of June 14, 1819. The law thus created provided for the establishment of a "Medical Society of Michigan," and also for county societies. Dr. William

Brown was elected its first president.[3] According to available accounts this first society received considerable opposition from the irregular practitioners of the state. In the years which followed its establishment, the records indicate that this antagonism grew in intensity.[3]

In 1851, the activities of irregular practitioners, principally herbalists, or Thomsonians, as they were spoken of, led to the annulment of the Act of 1819, thus abolishing all legal protection of medical societies.[3] According to Dr. Henry Taylor of Mt. Clemens, "the Legislature had concluded that medical men could get along with its protection," thus throwing the medical profession of the state on its own resources.[4] No effort was made at reorganization until 1853, when, pursuant to a call by a large number of physicians in various parts of the state, a meeting was held at the Medical School of the University of Michigan on March 30, 1853, "for the purpose of organizing a State Medical Association."[5,6]

Following its reorganization in 1853, the Medical Society of Michigan held annual meetings at Ann Arbor on commencement day for four years, the fifth at Detroit, the sixth at Ann Arbor, the seventh at Lansing, and the next at Coldwater; but so few members were present that they adjourned once more to Ann Arbor where the organization again dissolved.[5] Its downfall was attributed by Dr. Leartus Connor to "(1) The commercial disasters of 1857, (2) the growlings of the approaching civil war, (3) the natural operation of the feuds of former years, (4) the lack of stimulus from opposition, and (5) absence of sustaining interest of many local societies."[7] The Civil War was shortly to turn the attention of physicians in the state to more pressing affairs.

With the close of the war, Michigan physicians again took steps to organize themselves into a state society. The district medical society of Grand Rapids and the North-Eastern District Medical Association were most active in this respect.[8] After conferring with similar organizations elsewhere in the state, these societies issued a call for a convention in the city of Detroit on June 5, 1866.[8] At the meeting which followed, about one hundred physicians gathered at the Supreme Court room from all parts of the state.[9] "We have come together now to atone, as far as in us lies, for the past, and by this reunion to reorganize and revivify our State Medical Society," said Dr. Morse Stewart of Detroit.[9] Since that time the society has continued to grow and extend its usefulness to both its members and people of the state generally.[10]

District medical societies began to be organized about 1850. The Grand River Medical Association was formed at Grand Rapids on the first Thursday of June, 1851. It included in its membership, physicians from the counties of Ionia, Montcalm, Ottowa, Kent and Muskegon.[11] On March 8, 1853, a meeting was held at Romeo for the purpose of organizing another district medical association.[11] Still another meeting in June of this same year resulted in the formation of the South-Eastern Medical Association.[11]

As mentioned, the activities of irregular practitioners of medicine and of patent-medicine vendors were the cause of much concern to the members of the regular medical profession. The withdrawal, in 1853, of the law sustaining medical societies of the state enabled the Homeopath, Hydropathist, Eclectic, Thomsonian, Uriscopic, and Stick Doctors to raise their heads as high as the regular physician. This state of affairs, so it is said, disgusted many medical men.[12] "For more than half a century, have these sticklers for equal rights—these advocates for. unbridled liberty, been making their appeals to community to enkindle a prejudice," said Dr. Henry Taylor of Mt. Clemens, "and create disapprobation of the medical profession—accusing them of monopolizing the healing art, however pleasing or profitable they might think to make it to themselves, and thus withhold from them the pleasure of contending arm to arm, and on equal ground, with death, and of wrestling with the diseases and suffering of their fellow-men."[12] The newspapers of this period (1850-1888) were filled with the advertisements of patent medicine vendors and of numerous kinds of quacks.[13]

In his presidential address of 1871, Dr. I. H. Bartholomew devoted a considerable portion of this address to the subject of quackery in the state.[14] "The public in its zeal to overthrow exclusive rights (those of the profession among others)," said Dr. Bartholomew, "and to give evidence of the propriety and sincerity of its course, made it legal for idiots to practice medicine, and then offered itself, a great conglomerate patient, for idiots to practice

on." To secure a following among the people, quacks and charlatans made frequent use of the mails, sending out circulars which claimed to simplify the true science of medicine.[15] Large numbers of quacks, so it is said, came to Michigan in 1881 following the enactment of a law in Illinois regulating medical practice and depriving them of a livelihood.[16]

Among the more vociferous of the irregular practitioners of medicine in the state were the group known as "Homeopaths." With the appearance of the *Michigan Journal of Homeopathy* in December, 1848, repeated diatribes were directed against their competitors, the regular physicians, whom they chose to call "Allopaths."[17] The editors of this journal, Drs. John Ellis and S. B. Thayer, openly avowed their intention of overthrowing the system of medical practice used by their medical brethren. "We here freely state what we desire to see accomplished," wrote Drs. Ellis and Thayer in their initial number of the *Journal,* "it is nothing less than an entire overthrow of the present system of bleeding, blistering, vomiting, physicking, salivating, et cetera, and the substitution of Homeopathy, a system as beautiful and harmless, as it is scientific and efficacious; and we shall never be satisfied until the old practice in all its forms is entirely overthrown, and the new universally substituted."[17] "In presenting a medical *Journal* to the public," they asserted, "it is but reasonable that we state why we are induced to it, what we desire to accomplish, and whether we can hold forth to our patrons a reasonable prospect of success. No one can question for a moment the importance of medical men possessing correct medical knowledge, but why, we ask, should the community be kept in ignorance on medical subjects? Is the preservation of health and life of no importance, and is knowledge upon this subject of no use to the community? We believe it is of vast importance, and that true knowledge tends to elevate the minds of those who receive it; and, as the mind becomes elevated into the freedom of truth, the individual feels within him a strong desire to impart the knowledge he possesses, and to elevate all around him to his own standard, unless he bows down a willing slave to his own selfishness, or cultivates a pride of opinion as unjust to his fellow-men, as it is contemptible. Who but the quack, desires exclusive privileges, carries a knowing look, shrouds medical subjects in mystery, strenuously withholds from his patients and the public all knowledge of composition of his medicines and compounds, encourages the use of patent-medicines, strives to obtain penal enactments and laws, to protect him in the enjoyment of his ill-gotten popularity? The quack, fearful that the public will not acknowledge his worth, and conscious of a lack of knowledge, of arguments and of skill, appeals to the above to sustain his influence instead of appealing to the understanding of his fellow men. Believing that the great truths of Homeopathy, and the advantages resulting from their adoption are so manifest that they can be comprehended by an intelligent people, and believing that this community possesses the requisite intelligence, we have established this *Journal* for the purpose of proclaiming these truths, and likewise of spreading light and knowledge on medical subjects generally."[17] The first seven numbers of the *Journal* contained a series of articles entitled "What is Homeopathy?"

Prevention of disease was strongly advocated by Messrs. Ellis and Thayer. "As the prevention of disease is quite as important as its cure," they said, "and as it has been almost entirely neglected by medical men, we shall, as we have opportunity, call attention to the diet suitable for well and sick, to the great abuse of medical substances in food and drink, as well as pass in review the different methods of drugging, which are so prevalent, not only in, but out of the profession, from which arise such a multitude of drug diseases." "Strange as it may appear," they added, "the most beautiful feature of this system, the smallness of the dose, is the point which meets with the strongest and most unrelenting opposition. So long have physicians and even patients, yes, even children, been accustomed to associate suffering and torture with the idea of being cured of disease, that the possibility of being relieved without being made sick is regarded as absurd by medical men, while patients expect to run the gauntlet between diseases and the doctor, and do not expect to be cured without being made worse, and submitting to the most cruel and unnatural operations, such as the lancet, cathartics, blisters, et cetera, et cetera, which, of themselves, are sure to make even well men sick. Even children learn to look upon the physician as a regular leech, and fly at his

approach as such, while parents hold the doctor over them as a rod of correction. May we not then look for a radical change, a change which shall not suffer more than one half of the inhabitants of the world to die before they are ten years old, as they do under the present practice? Take from homeopathy her infinitesimal doses, and she is shorn of her beauty, and, to a great extent, of her efficacy, and becomes even less safe than allopathy."[17]

In 1875, the legislature was so influenced by the entreaties of the homeopathic practitioners of the state that they passed an act authorizing the Board of Regents of the University of Michigan to establish a Homeopathic Medical College as a branch of the University, to be located at Ann Arbor.[18] This occurrence provoked still greater rivalry between the adherents of the two systems of medical practice.[18] The medical literature of this period is filled with accusations and counter-accusations of the followers of both groups. "The very nature of the purposes of the Board," said Dr. H. O. Hitchcock, referring to the activities of the State Board of Health, "left it out of and above the field of the active, constant, and many-sided strife of the pathies, because, as a board of health, it does not concern itself with the practice of medicine, or with the theoretical or practical action of remedies on the various diseases. Hence it can, does, and ought to coöperate with, and receive the coöperation of all individual members, and all organized societies of the profession in its means and measures for the prevention of disease." In spite of this expression of unbiased adherence to either system of medicine, both the State Board of Health as well as the State Medical Society took an active part in seeking to improve the quality of medical practitioners and medical education in the state.[19]

### State Board of Registration

The original effort in 1819 to regulate the practice of medicine by the enactment of protective legislation, resulted in dismal failure.[20] Outcries by quacks and irregular practitioners in the state for "equal opportunities" were to lead to the abolition of all protective medical legislation in 1851.[20] In the years which followed, however, other developments occurred which were destined to be far superior to legal protection of organized medicine.

At the fourth annual meeting of the State Medical Society on June 8, 1870, Dr. H. O. Hitchcock of Kalamazoo introduced the following resolution:

> Resolved, That the society will hereafter annually select two members each, to visit the medical schools of the State, and especially attend the examination of candidates for the degree of Doctor of Medicine and faithfully to report to this Society upon the conditions of the schools and the thoroughness of their teachings and examinations.

The resolution was adopted by a unanimous vote.[20] The following year at a similar meeting, still another resolution of the same nature was adopted.[21]. Dr. William Parmenter of the Committee on Legislation urged that a law be passed requiring competent qualifications of all who would practice medicine.[22]

Soon after the State Board of Health was established, it was evident to several of its members that the Board must take an active part in the issue if it was to live up to the objectives set for it. Evidently influenced by a law passed at the session of the Illinois Legislature in 1881, Dr. Hitchcock offered the following resolution which was adopted:

> Resolved, That the committee on legislation be requested to make inquiries to the recent Act in the Illinois Legislature "Regulating Medical Practice," and to its practical working, and to report to this Board whether in its opinion a similar Act in our own state is desirable.[23]

Another resolution offered by Dr. Henry F. Lyster at this same meeting was amended to read as follows:

> Resolved, That this Board organize itself into an examining college, and institute an annual examination of candidates in subjects relating to public health.

This latter resolution was referred to a special committee, consisting of Dr. Lyster and the Hon. LeRoy Parker, to be reported on at the next meeting.[23]

The following year the Hon. LeRoy Parker, Committee on Legislation, reported that in his opinion a similar law for the State of Michigan was desirable, but he doubted very much that the State Board of Health should be the body authorized to conduct such examinations or issue certificates. Lack of personnel, financial remuneration, and possible conflict with schools of medicine were cited as reasons why the Board should refrain from engaging in this practice.[24]

He, however, concurred in the proposal of Dr. Lyster of the Board, that the State Board of Health conduct examinations which were to be voluntary.[24] Later in the same meeting, a preamble and memorial were drawn up by Dr. Hitchcock, which petitioned the legislature to enact some law or laws for the protection of the people from the dangers to life and health attendant upon the medical practice of ignorant and unqualified practitioners of medicine. This was adopted with one amendment, and signed by members of the Board and next transmitted to the legislature.[23] It passed both branches of the legislature, but for reasons not revealed in available reports, it failed to receive the signature of the Governor owing to some technicality in its passage.[23]

On October 10, 1880, the following resolution was offered by Dr. Henry F. Lyster at a meeting of the State Board of Health:

> Resolved, That a committee of three be appointed by the chair to report at the next meeting upon a plan for the legalization and registration of the medical profession in this State, and to confer with such other organizations or individuals as may be interested in the passage of a bill regulating the practice of medicine by the Legislature of Michigan.[25]

This was concurred in by those in attendance at the meeting, and a committee consisting of Dr. Henry B. Baker, Dr. Henry F. Lyster, and Rev. D. C. Jacokes appointed to study the resolution. According to the accounts which follow, nothing apparently was done, for on October 10, 1882, at another meeting of the Board, the Hon. LeRoy Parker and Rev. D. C. Jacokes were appointed a committee on the practice of medicine in place of the former committee which was ordered discharged.[26] On January 9, 1883, the following resolution was adopted by the Board:

> Resolved, That there should be required of all who are to begin the practice of medicine in this State an examination as to their qualifications.
> Resolved, That such examinations by the State should be restricted to questions in demonstrable knowledge as distinguished from questions of mere opinion.
> Resolved, That as a public health measure these two resolutions be referred to the president and secretary with a request that they do what they can to promote the objects of the resolutions.[26]

Dr. Baker went a step further and drew up a proposed bill to regulate the practice of medicine in the state. This he had published in the *Michigan Medical News*.[27] Apparently these several efforts were unavailing, for a search of the literature in the period under consideration (1850-1888) fails to show further progress in this direction.

Efforts to secure registration of physicians in the state were more successful. The Hon. LeRoy Parker, Committee on Legislation of the State Board of Health, succeeded in getting a bill for this purpose before the legislature where it was favorably received and passed late in 1883.

**This act (No. 167, Laws of 1883) required all practitioners of medicine and surgery or any other branch thereof to file with the clerk of the county in which they engaged in practice, or in which they intended to practice, a sworn statement setting forth the length of time they had engaged in continuous practice in said county, and if a graduate of a medical school, the name of the same and where located, when they graduated, and the length of time they attended school; also the school of medicine to which they adhered. County clerks were required by the act to record these statements in a book.[28]**

A similar law (Act No. 140, Laws of 1883) required all dentists in the state to register in a like manner with the county clerk in their locality.[28] In January, 1884, Dr. Baker of the State Board of Health, sent a circular, together with a blank form, for reply to all the county clerks of the state, asking them for the names, addresses, et cetera, of the physicians in the state.[28] According to the replies received, "the number of practitioners returned is 3,270, of whom 2,366 or 72 per cent, are reported to have graduated from some college, society, or institution; 197, or 6 per cent, are reported to have attended some college; and 707, or 22 per cent, are not reported to have attended a college or anything that could be called a medical school."[28]

In 1887, the original act was slightly amended (Act No. 268, Laws of 1887) to permit clerks of cities, villages, and townships to transmit to the Secretary of the State Board of Health a list of medical practitioners in their jurisdiction.[29]

### Interest in Sanitation and Hygiene

From evidence already cited, it is clear that medical societies played a major rôle in furthering the progress of the public health movement.

As a professional group they gave freely of their time and worked unselfishly in the promotion of community welfare.* Many of the ideas which later culminated in the Registration Law of 1867, and still later in the establishment of the State Board of Health, had their birth in the papers read before district and state medical societies.

At the seventh annual meeting of the State Medical Society, a resolution was introduced by Dr. Pratt of Kalamazoo requesting the legislature to print the annual transactions of the State Medical Society as a State Document:

WHEREAS, The transactions of this Medical Society must contain much information relative to the preservation of health and the prevention of disease, which it will be important to the people of this State to have in possession; and

WHEREAS, It is unjust to require the Medical Profession, at their individual expense, to publish this information for the benefit of the State; and

WHEREAS, Other Legislatures have recognized it as their duty to spread before the people they represent all facts having an important bearing upon sanitary reform; therefore, be it

RESOLVED, That we respectfully request the Legislature of this State, now in session, to inaugurate the practice of publishing as one of the State Joint Documents, the Annual Transactions of this Society.[30]

This resolution was adopted by a unanimous vote and laid before the legislature by a committee from the State Medical Society.[30] There it was favorably acted upon by both branches of the legislature and approved by the governor. As far as the records reveal, this is the first instance in which the State Legislature ordered a document published because of its value in improving the public health.[31]. For some reason which the records fail to reveal, the practice of publishing the transactions of the State Medical Society by the state was not resumed after the Civil War.

At the initial meeting for organization of the State Medical Society at Detroit in 1866, a committee on "Medical Hygiene" was appointed, consisting of Drs. A. B. Palmer of Ann Arbor; D. O. Farrand of Detroit, and C. Paddacke of Pontiac.[32] This appointment was made at the suggestion of Dr. J. H. Jerome of Saginaw City.[33] Elsewhere in the state, other committees on hygiene were shortly to lend impetus to the public health movement.[34]

### Physicians and the State Board of Health

In general, the physicians of the state continued their interest in hygienic matters long after the State Board of Health was established. Coöperation with the Board, however, was frequently asked by those who saw the need for cooperative action by the physicians of the state with the local and state boards of health. An editorial appearing in the *Detroit Review of Medicine and Pharmacy,* soon after the State Board of Health was established, urged the physicians of the State to follow its leadership:

*Michigan State Board of Health*

It is well known to all our readers that we have a State Board of Health, one well qualified for its work. This board has chosen for its secretary, Dr. H. B. Baker, Superintendent of Vital Statistics. His ability and fitness for his task are superior in every respect. Thus, with a competent board and competent secretary, we shall look for great and good results to the profession and people of the State.

No study of the health of Michigan will be entirely satisfactory until it is able to combine the individual study of each active physician in every city, town, hamlet, and even open country. What the signal service has been in relation to the climate of our country, is a feeble type of what our board of health may expect to be in relation to public health, if fully supported by every physician. Let us, brethren, organize under their direction, and labor without ceasing for the accomplishment of this great end. It will make demands upon our ease, our time, our pockets, our brains, etc., but let us give as needed, without stint, without a murmur, cheerfully, earnestly and conscientiously.[35]

During the same year at a meeting of the State Medical Society, Dr. Foster Pratt of Kalamazoo offered a resolution calling for the support of the State Board of Health by the State Medical Society. This was heartily approved.[36]

*At the seventh annual meeting of the State Medical Society, Dr. H. B. Baker offered the following resolution which was adopted by the Society:

RESOLVED, That while the physician's work of relieving human suffering is one of the noblest of human employments, it is more honorable to the profession, and very much more to the interest of the people, when physicians are paid for and employed as much as possible in preventing sickness, than when entirely employed in combatting results or causes, many of which might be removed or avoided by the use of means within the present knowledge of physicians; that this society therefore, earnestly recommends and encourages the employment of physicians: First, as health officers on boards of health; Second, as lecturers and instructors in hygiene in the public schools; Third, as sanitary advisors of government officers, of corporations, persons, or families, on special occasion, or by the year; Fourth, as editors of sanitary journals or publications or in any other honorable manner whereby it becomes equally for the interest of the physician and the people that health prevail.

RESOLVED, That this society warmly approves of the action of the late and of the present Governor of this State, in recommending the establishment of a State Board of Health, and of the Legislature, in passing a law providing for the same; that it is reasonable to hope that much good will result from the intelligent action of such board in their labors for the prevention of unnecessary deaths and disease among the people of this State.

RESOLVED, That in view of the prospective demands upon physicians for the application of sanitary science to the affairs of government and of society, it becomes important that medical colleges give increased attention to teaching those who are to be physicians concerning the cause and methods of preventing diseases, and that in future individual members of our profession endeavor to contribute liberally to the advance of the science of public hygiene, in order that the profession may continue to maintain its leading position in advance of the demands of the people.—Trans. M.S.M.S., p. 18, 1873.

Other members of the State Medical Society, however, were inclined at times to disagree with their colleagues relative to the policies of the State Board of Health. This is readily apparent from remarks made by Dr. William Brodie in his presidential address in 1876 before the tenth annual meeting of the State Medical Society. Said Dr. Brodie, "The subject of Hygiene is one of important interest, not only to the physician but to the citizen. The laws of health cannot well be disregarded without entailing their consequences. Heretofore this subject has occupied the attention of the different medical societies, State and local, but since the advent of the State Board of Health this interest has in a measure abated, owing to the fact that the Board of Health has taken it under its own special protection. It is evident from an examination of the reports of the Board that the profession outside thereof take but little interest in its labors and furnish but a small modicum of their proceedings. This can be accounted for on two grounds at least, which are fundamental to its success; (1) The Board is composite, having professional and non-professional elements in its formation, when it should be entirely medical. (2) Although the law of its organization says nothing about its political complexion, yet all the members have been of the same political creed as the Governor while men of medical and scientific attainments, without equal, if not of more experience, but holding contrary political opinions, have not been thought worthy of appointment. Science should know no political belief, but when it is so prominently thrust forward, as in the organization of the State Board of Health, it presents sufficient reasons for the lack of interest on the part of many of the profession. Yet another reason may be added. By the law, instead of each township, village, or city having a well-informed physician properly compensated, and as such properly recognized by law, to examine into the hygienic conditions of the locality under his jurisdiction and report to the Board the whole subject is left to be examined and reported upon by the clerk of such township, village or city board of health, whose education might be so limited on the subject as not to know whether excessive moisture or excessive dryness is most productive of malaria. Notwithstanding all this and the consequent inaccuracies of statistics collated under such circumstances, the Board has presented a large amount of practical information, which has been distributed to the public through their annual reports prepared by their efficient Secretary, a member of this Society, Dr. Henry B. Baker."[37] For reasons which the records fail to explain, he also recommended, in the course of his address, that a committee of one physician from each organized county in the state be appointed to report upon its hygienic condition at the next annual meeting.[37]

In 1880, Dr. H. O. Hitchcock, a member of the State Board of Health, offered a resolution to the State Medical Society—"Resolved, That in the opinion of the members of this Society the laws of the State requiring physicians to report to the local board of health, or to the health officer of their locality, all cases of sickness and death of disease contagious or dangerous to the public health, are wise and proper and ought to be complied with."[38] To this Dr. Brodie and several others took strong exception, asserting that the state had no right to compel the services of physicians in such duties without remuneration. On motion, however, the resolution offered by Dr. Hitchcock was approved.[38]

### State Medical Journals

The several medical journals published at various times during the period under consideration (1850-1858) contributed in many ways to the growth of the public health movement. *The Michigan Journal of Homeopathy*, although expounding chiefly the theory of Hahnemann, deserves mention in that it endeavored to educate the people in matters of health and disease. This journal was begun on November 11, 1848, by Drs. John Ellis and A. B. Thayer of Detroit and continued until June, 1854.[39] *The Peninsular Journal of Medicine and Collateral Sciences* had its beginning in 1853.[40] This was the chief organ of the regular profession. It devoted considerable space to observations on meteorology and the health of the people in the state.[39] "This enterprise," said Dr. E. Andrews, its editor, "has long been contemplated by the profession of Michigan, and the want of it has been severely felt. What the medical men of this region need is to concentrate their power, and organize their strength. There is intellect enough, and learning enough

among them to command the highest honor and respect from community and there is power enough to blow the breath of annihilation upon their enemies, and sweep out quackery as in a whirlwind from their path.[40] According to Dr. Walter H. Sawyer of Hillsdale, writing in the *Medical History of Michigan,* "The Journal organized movements which finally resulted in the proper care of the insane in institutions under and conducted by the State instead of by counties, movements for the proper registration of deaths, births, and marriages; for state and local health boards."[39] This journal merged with another similar publication in 1858 becoming the *Peninsular and Independent Medical Journal.* As such it continued until March, 1860, when it was discontinued because of lack of funds.[41] Following the war period, another journal made its appearance having the title of *Peninsular Journal of Medicine.* Other journals of this period included the *Detroit Lancet,* the *Michigan Medical News,* and the *Detroit Review of Medicine and Pharmacy.*

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**YOU WILL NEVER . . .**

You will never operate under a carbolic acid shower. You will probably never carry a catheter in the sweatband of your hat. You will never see tan bark on the streets around hospitals to prevent noise or bales of oakum and peat moss in hospital corridors to be used as overdressing for infected wounds. You will never see 100 cases of typhoid in a row or 5 in one family die of diphtheria in one and one-half hours!

At the one hundred and thirty-fifth annual meeting of the Medical Society of the State of New York, 1941, in Buffalo, you will see not a single tracheotomy demonstrated or 1 case of diphtheria intubated. Yet at the time of the eighty-first meeting, O'Dwyer's tubes were the surgeon's hope. Of his experiences Jacobi wrote: "nearly 3,000 tracheotomies, 2,800 terminated in death." Fifty-four years.

You might come to Buffalo on April 28 by steam train or arrive in a horse-drawn buggy, if you live close by, as you would have come to the eighty-first meeting; but the chances are you will come by automobile or plane this year, if you can, and keep in touch with your office by using the improved facilities of Mr. Bell's recently developed telephone. If you are unavoidably prevented from attending, you may be able to hear some of the proceedings through the courtesy of Senatore Marconi, Dr. Lee DeForest, and others of our recent co-workers in science. And we can assure you that they will be worth hearing.

We think it only fair to remind members that while in Buffalo they will be within the jurisdiction of the hardy and formidable Medical Society of the County of Erie. In the year 1827 the society's receipts in membership fees amounted to $11. A resolution authorized the treasurer "to collect outstanding dues from members—peaceably if he can, forcibly if he must." Such is the quality of our hosts. Surely the visiting membership of the State Society can reasonably expect great things from men of such caliber, vigor, and determination.

In passing, it is of more than historic interest that in the University of Buffalo, founded in 1846, Dr. White raised a storm of protest in Buffalo, throughout the state, and, indeed, throughout the United States by "introducing demonstrative or clinical midwifery" into the college course. It had never before been attempted in this country. "Seldom," it is said, "has an event occurred that so completely shook the foundations of society in any city as did this." Newspapers denounced it as immoral. Dr. White was drawn into the law courts and was vindicated; for many years he continued to teach obstetrics and gynecology in the university.

Noteworthy also is the fact that Dr. Roswell Park and Assemblyman Henry W. Hill secured in 1898 from the Legislature the first appropriation ever made from public funds, either in this country or abroad, for the purpose of combating the ravages of cancer.

Currently, we are immersed in vast preparations for national defense. These preparations contemplate not only the mobilization of large numbers of men but the mobilization also of the vast store of technical and scientific knowledge which is available. Much of this will be forthcoming at the annual meeting for your benefit. Make it your business to be there.

# EDITORIAL

## MAD DOGS

■ Every now and then a book of fiction is published in which the theme of the story deals with an evil person who sets loose mad, vicious dogs to protect him from his enemies so that he might pursue his malicious ways.

Today we are living through such a period. Not alone in Europe, Africa and Asia have the mad dogs of war been loosened but also the mad dogs of economic and social existence have been released from their necessary restraint in the United States to make more rapid a sure, but slowly progressing change.

It has even permeated the field of health. Idealists have been given free reign and among them those whose main attributes are instability and lack of respect for sane evolution. It has been said that ideals are dangerous explosives, to be entrusted only to experienced hands.

In the Wisconsin legislature the American Medical Association was accused of having refused to take cognizance of the fact that large groups of our population are deeply concerned on the subject of how they can beat the high cost of medical care. "* * * But these people are being thwarted in their efforts in one little simple device on the part of the A.M.A and its constituent societies * * *!" This "device" referred to is evidently the action of hospital staffs in refusing membership to unethical doctors of medicine.

Sympathy with the desire to provide all people with the best physical care and comforts is offered generally. In the hands of some politicians and idealists this means the revolutionary destruction of great principles: those great principles, by adherence to which hundreds of thousands of men sacrificed the indulgence of their mental and physical welfare in order that a greater share of these benefits may be reserved for the unfortunate.

Strive as one may to find more sincere aims, the only connecting link in the entire chain of facts is an endeavor to enslave the medical profession. When that day comes the physician must be in politics for his livelihood. Now, the physician needs to be in politics to destroy these mad dogs and restrain and restrict the idealist, as one punishes an irresponsible child—not prohibit free exercise, but keep it within the bounds of sanity until security and realization of responsibility make safe their untrammeled freedom.

Benjamin Franklin once said, "They that can give up essential liberties to obtain a little temporary safety deserve neither liberty nor safety."

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## THE DOCTOR AND SAFETY

■ There is probably no other profession or group which has as intimate interest in the safety problems of the people as the doctors of medicine. It is, moreover, probably the only group which preaches, fights and acts for *prevention* when the continuance would increase financial gain.

[Were we of the medical profession as sordid commercialists as has been declared, the practice of medicine would be a sorry one, indeed.]

Most physicians, however, feel that their organizations are *still* not using *all* the influence possible in this angle of preventive medicine. While the means for securing *these* preventive measures are not as peculiarly medical in character as those advocated for the control of epidemics, the organized profession does and should, in a continuously increasing amount, urge the adoption of rules, procedures, and construction, along with education, for the prevention of accidents as well as disease.

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1. American Medicine, under the system of independent practice and self-discipline and control, has developed and provided the most effective and most widely distributed medical service ever known in the world.
2. There is no panacea for the general problem of providing medical care—the need varies according to conditions and types of populations.
3. There is a well defined and powerful group which seeks to remove the control of medical service from physicians and place it in the hands of political groups regardless of the quality and effectiveness of the service to the public.
4. The first and most essential requirement in providing adequate medical care is an understanding, on the part of the public, of the constituent elements of a satisfactory service.—*National Physicians Committee for the Extension of Medical Service.*

# Success, and Thanks

President's Page

ALMOST successful legislative experience has been the fortunate lot of the medical profession this year. A number of good health and medical bills have been enacted into law; those proposals inimical to the health of the people have quietly been killed by the Legislature.

Thanks, most sincere, are extended to the members and officers of the Legislature, and to the Governor, for the courteous reception extended the representatives of the medical profession and the thoughtful consideration they have given medical and health measures coming before them.

Grateful acknowledgment, and a sincere vote of thanks, is extended to the three hundred legislative "key-men" of the Michigan State Medical Society, for their sacrifice of time, effort and expense in contacting members of the Legislature and keeping them informed concerning the highly technical medical legislation—exactly fifty-one proposals—which were before the Legislature in 1941. The work of these family physicians and friends of the legislators has been a constant task from the time the Legislature convened on January first until it adjourned at the end of May.

Again, Your Excellency, Honorable Members of the Legislature, and members of the Michigan State Medical Society, we thank you!

President, Michigan State Medical Society

# YOU AND YOUR BUSINESS

## THE BROWN-WAGNER-GEORGE HOSPITAL CONSTRUCTION BILL

Senator Brown of Michigan recently introduced into the United States Congress S-1230 for himself, for Senator Wagner of New York and Senator George of Georgia.

The purpose of Senate Bill 1230 is to offer grants-in-aid to assist state and other political subdivisions in constructing, improving and enlarging needed hospitals especially in rural communities and economically depressed areas, and to assist in the maintenance of such hospitals and in the training of personnel.

This bill is identical with the Wagner-George Hospital Construction Bill (S-3230), which was passed by the Senate (but not by the House of Representatives) in the 76th Congress.

The present bill retains the provision for osteopathic representation on the National Advisory Hospital Council to be created by the bill. It also retains the broad definition of the term "hospital" which would include *"health, diagnostic and treatment centers, the equipment thereof and facilities relating thereto."* The potentialities wrapped up in this definition need not be emphasized!

The impact that such a building program would have on the practice of medicine in Michigan, as well as in the United States generally, can easily be visualized!

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## DAMAGE MUST RESULT FROM THE ACT

Before recovery may be had against a physician or surgeon for an alleged tortious act it must first be proved that the damage alleged came from the act complained of. Anyone may be guilty of every conceivable kind of negligence, but if no damage results from it no legal action can be predicated upon it.—*Humphreys Springstun, of the Detroit Bar. Doctors and Juries. P. Blakiston's Son and Co., Inc., 1935.*

**Calling All Doctors**

who have taken postgraduate work other than in our Michigan program.

Please send details for evaluation and credit at once to the State Secretary, L. Fernald Foster, M.D., 919 Washington Avenue, Bay City.

## OUTLINE OF GENERAL ASSEMBLY PROGRAM

### Seventy-sixth Annual Meeting, Michigan State Medical Society

### Grand Rapids—September 17, 18, 19, 1941

| | Wednesday, September 17 | Thursday, September 18 | Friday, September 19 |
|---|---|---|---|
| *A. M.*<br>9:30 to 10:00 | Medicine<br>Russell L. Cecil, M.D.<br>New York City | Obstetrics (Maternal Health)<br>James R. McCord, M.D.<br>Atlanta, Georgia | ON THE SEVEN SECTION PROGRAMS<br>General Medicine<br>A. R. Barnes, M.D.<br>Rochester, Minn |
| 10:00 to 10:30 | Surgery<br>Elliott C. Cutler, M.D.<br>Boston | Medicine (Tuberculosis)<br>Charles E. Lyght, M.D.<br>Northfield, Minn. | Surgery<br>Harry E. Mock, M.D.<br>Chicago |
| 10:30 to 11:00 | VIEW EXHIBITS | VIEW EXHIBITS | Obstetrics & Gynecology<br>Richard TeLinde, M.D.<br>Baltimore |
| 11:00 to 11:30 | Syphilology<br>Francis E. Senear, M.D.<br>Chicago | Medicine<br>V. P. Sydenstricker, M.D.<br>Augusta, Georgia | Ophthalmology & Otolaryngology<br>Samuel Iglauer, M.D.<br>Cincinnati |
| 11:30 to 12:00 | Gynecology<br>George W. Kosmak, M.D.<br>New York City | Pediatrics<br>James Gamble, M.D.<br>Boston | Pediatrics<br>Harold K. Faber, M.D.<br>San Francisco |
| *P. M.*<br>12:00 to 12:30 | Medicine (Mental Hygiene)<br>Lawrence Kolb, M.D.<br>Washington, D. C. | Obstetrics<br>Wm. E. Caldwell, M.D.<br>New York City | Dermatology & Syphilology<br>S. Wm. Becker, M.D.<br>Chicago<br>Radiology, Pathology, Anesthesia<br>Bernard H. Nichols, M.D.<br>Cleveland |
| 12:30 to 1:30 | LUNCHEON<br>VIEW EXHIBITS | LUNCHEON<br>VIEW EXHIBITS | LUNCHEON<br>VIEW EXHIBITS |
| 1:30 to 2:00 | Anesthesia<br>Wesley Bourne, M.D.<br>Montreal | Ophthalmology<br>Alfred Cowan, M.D.<br>Philadelphia | Otolaryngology<br>D. E. Staunton Wishart, M.D.<br>Toronto |
| 2:00 to 2:30 | Surgery (Indus. Health)<br>A. J. Lanza, M.D.<br>New York City | Pathology<br>Shields Warren, M.D.<br>Boston | Dermatology<br>Carroll S. Wright, M.D.<br>Philadelphia |
| 2:30 to 3:00 | VIEW EXHIBITS | VIEW EXHIBITS | VIEW EXHIBITS |
| 3:00 to 3:30 | Pediatrics<br>Henry Poncher, M.D.<br>Chicago | Medicine<br>Chester S. Keefer, M.D.<br>Boston | Pediatrics (Child Welfare)<br>E. C. Mitchell, M.D.<br>Memphis |
| 3:30 to 4:30 | DISCUSSION CONFERENCES WITH GUEST ESSAYISTS | DISCUSSION CONFERENCES WITH GUEST ESSAYISTS | 3:00 to 4:00<br>Medicine<br>C. A. Doan, M.D.<br>Columbus<br>4:00 to 4:30<br>Surgery<br>Owen H. Wangensteen, M.D.<br>Minneapolis |
| 8:30 to 10:00 | President's Night<br>Biddle Oration<br>in Hotel Ballroom<br>Speaker: Alphonse Schwitalla<br>Dancing | Smoker<br>in Pantlind Hotel Ballroom | END OF CONVENTION |

## DELEGATES TO MSMS HOUSE OF DELEGATES—1941

### (Names of alternates appear in italics)

**Allegan**
C. A. Dickinson, M.D., Wayland
*W. C. Medill, M.D., Plainwell*

**Alpena-Alcona-Presque Isle**
W. E. Nesbitt, M.D., Alpena
*A. R. Miller, M.D., Harrisville*

**Barry**
Gordon F. Fisher, M.D., Hastings
*J. K. Altland, M.D., Traverse City*

**Bay-Arenac-Iosco**
C. L. Hess, M.D., Davidson Building, Bay City
Fred Drummond, M.D., Kawkawlin
*R. H. Criswell, M.D., Phoenix Bldg., Bay City*
*J. N. Asline, M.D., Essexville*

**Berrien**
Don W. Thorup, M.D., Benton Harbor
*Noel J. Hershey, M.D., Niles*

**Calhoun**
Harvey Hansen, M.D., 1102 Central Tower, Battle Creek
A. T. Hafford, M.D., Albion
*Geo. W. Slagle, M.D., 1506 Central Tower, Battle Creek*
*A. A. Humphrey, M.D., Leila Hospital, Battle Creek*

**Branch**
R. L. Wade, M.D., Coldwater
*Samuel Schultz, M.D., Coldwater*

**Cass**
S. L. Loupee, M.D., Dowagiac
*K. C. Pierce, M.D., Dowagiac*

**Chippewa-Mackinac**
L. M. McBryde, M.D., Sault Ste. Marie
*W. F. Mertaugh, M.D., Sault Ste. Marie*

**Clinton**
G. H. Frace, M.D., St. Johns
*W. B. McWilliams, M.D., Maple Rapids*

**Delta-Schoolcraft**
J. J. Walch, M.D., Escanaba
*W. A. LeMire, M.D., Escanaba*

**Dickinson-Iron**
W. H. Alexander, M.D., Iron Mountain
*E. B. Andersen, M.D., Iron Mountain*

**Eaton**
Paul Engle, M.D., Olivet
*F. W. Sassaman, M.D., Charlotte*

**Genesee**
George J. Curry, M.D., 402 Genesee Bank Building, Flint
Donald R. Brasie, M.D., 907 Citizens Bank Bldg., Flint
Frank E. Reeder, M.D., 808 Genesee Bank Bldg., Flint
Henry Cook, M.D., 400 Sherman Bldg., Flint
*Robert D. Scott, M.D., 1215 Detroit St., Flint*
*A. Dale Kirk, M.D., 300 E. First St., Flint*
*T. S. Conover, M.D., 400 Sherman Bldg., Flint*
*Frank Johnson, M.D., 319 Dryden Bldg., Flint*

**Gogebic**
J. D. Reid, M.D., Ironwood
*H. T. Nezworski, M.D., Ramsay*

**Grand Traverse-Leelanau-Benzie**
Robert T. Lossman, M.D., Traverse City
*H. B. Kyselka, M.D., Traverse City*

**Gratiot-Isabella-Clare**
M. G. Becker, M.D., Edmore
*W. L. Harrigan, M.D., Mt. Pleasant*

**Hillsdale**
Luther W. Day, M.D., Jonesville
*O. G. McFarland, M.D., North Adams*

**Houghton-Baraga-Keweenaw**
C. A. Cooper, M.D., Hancock
*Alfred LaBine, M.D., Houghton*

**Huron**
C. W. Oakes, M.D., Harbor Beach
*C. A. Scheurer, M.D., Pigeon*

**Ingham**
C. F. De Vries, M.D., 320 Townsend St., Lansing
T. I. Bauer, M.D., 301 Seymour St., Lansing
L. G. Christian, M.D., 108 E. St. Joseph St., Lansing
*Robert S. Breakey, M.D., 1211 City National Bldg., Lansing*
*R. L. Finch, M.D., 124 W. Lenawee St., Lansing*
*C. S. Davenport, M.D., St. Lawrence Hospital, Lansing*

**Ionia-Montcalm**
W. L. Bird, M.D., Greenville
*C. T. Pankhurst, M.D., Ionia*

**Jackson**
J. J. O'Meara, M.D., 608 Peoples Bank Bldg., Jackson
Horatio A. Brown, M.D., 701 Reynolds Bldg., Jackson
*C. S. Clarke, M.D., 605 Dwight Bldg., Jackson*
*Charles R. Dengler, M.D., 305 Carter Bldg., Jackson*

**Kalamazoo**
I. W. Brown, M.D., City Hall, Kalamazoo
Louis W. Gerstner, M.D., 420 John St., Kalamazoo
*Wm. Scott, M.D., 716 American National Bank Bldg., Kalamazoo*
*Albert B. Hodgman, M.D., 1029½ W. North St., Kalamazoo*

**Kent**
A. V. Wenger, M.D., 302 Loraine Bldg., Grand Rapids
Carl F. Snapp, M.D., Medical Arts Bldg., Grand Rapids
Geo. H. Southwick, M.D., 55 Sheldon Ave., S.E., Grand Rapids
A. B. Smith, M.D., Metz Building, Grand Rapids
P. W. Kniskern, M.D., Medical Arts Building, Grand Rapids
*W. L. Bettison, M.D., Medical Arts Bldg., Grand Rapids*
*Christian G. Krupp, M.D., Kendall Bldg., Grand Rapids*
*Daniel DeVries, M.D., 1414 Eastern S.E., Grand Rapids*
*O. H. Gillett, M.D., 601 Metz Building, Grand Rapids*
*W. Clarence Beets, M.D., 2221 Jefferson Drive, Grand Rapids*

**Lapeer**
D. J. O'Brien, M.D., Lapeer
*H. M. Best, M.D., Lapeer*

**Lenawee**
A. W. Chase, M.D., Adrian
*Bernard Patmos, M.D., Adrian*

**Livingston**
D. C. Stephens, M.D., Howell
*D. A. Cameron, M.D., Brighton*

**Luce**
Henry E. Perry, M.D., Newberry
*R. E. Spinks, M.D., Newberry*

**Macomb**
D. Bruce Wiley, M.D., Utica
*A. B. Bower, M.D., Armada*

**Manistee**
E. A. Oakes, M.D., Manistee
*(No alternate named)*

**Marquette-Alger**
V. Vandeventer, M.D., Ishpeming
*R. A. Burke, M.D., Palmer*

**Mason**
W. S. Martin, M.D., Ludington
*V. J. Blanchette, M.D., Custer*

**Mecosta-Osceola-Lake**
Gordon Yeo, M.D., Big Rapids
*Paul B. Kilmer, M.D., Reed City*

**Medical Society of North Central Counties**
C. R. Keyport, M.D., Grayling
*Richard Peckham, M.D., Gaylord*

**Menominee**
H. T. Sethney, M.D., Menominee
*S. C. Mason, M.D., Menominee*

**Midland**
Edward Meisel, M.D., Midland
*(No alternate named)*

**Monroe**
D. C. Denma, M.D., Monroe
*J. H. McMillin, M.D., Monroe*

**Muskegon**
E. O. Foss, M.D., 502 Muskegon Bldg., Muskegon
E. N. D'Alcorn, M.D., 405 Michigan Theater Bldg., Muskegon
*(No alternates named)*

**Newaygo**
O. D. Stryker, M.D., Fremont
*W. H. Barnum, M.D., Fremont*

**Northern Michigan**
Wm. S. Conway, M.D., Petoskey
*Walter M. Larson, M.D., Levering*

**Oakland**
C. T. Ekelund, M.D., Riker Bldg., Pontiac
George A. Sherman, M.D., State Health Department, Lansing
Richard E. Olsen, M.D., St. Joseph Mercy Hospital, Pontiac
*Z. R. Aschenbrenner, M.D., Farmington*
*B. T. Larson, M.D., 216 Cherokee Rd., Pontiac*
*C. G. Darling, M.D., Riker Bldg., Pontiac*

**Oceana**
Merle Wood, M.D., Hart
*Fred Reetz, M.D., Shelby*

**Ontonagon**
W. F. Strong, M.D., Ontonagon
*H. B. Hogue, M.D., Ewen*

**Ottawa**
A. E. Stickley, M.D., Coopersville
*R. Nichols, M.D., Holland*

**St. Clair**
A. L. Callery, M.D., Peoples Bank Bldg., Port Huron
*D. W. Patterson, M.D., 622 Huron Avenue, Port Huron*

**St. Joseph**
John W. Rice, M.D., Sturgis
*R. A. Springer, M.D., Centerville*

**Saginaw**
C. E. Toshach, M.D., 333 South Jefferson, Saginaw
F. O. Novy, M.D., 420 S. Jefferson, Saginaw
*(No alternates named)*

**Sanilac**
R. K. Hart, M.D., Croswell
*H. V. Norgaard, M.D., Marlette*

**Shiawassee**
I. W. Greene, M.D., Owosso
*L. F. Bates, M.D., Durand—(Deceased 4-5-41)*

**Tuscola**
T. E. Hoffman, M.D., Vassar
*W. Dickerson, M.D., Caro*

**Van Buren**
W. R. Young, M.D., Lawton
*Edwin Terwilliger, M.D., South Haven*

**Washtenaw**
John A. Wessinger, M.D., 339 N. Washington Ave., Ann Arbor
Dean W. Myers, M.D., 317 S. State Street, Ann Arbor
L. J. Johnson, M.D., 1603 Granger, Ann Arbor
*C. L. Washburne, M.D., St. Joseph Mercy Hospital, Ann Arbor*
*L. E. Knoll, M.D., 227 E. Liberty, Ann Arbor*
*R. W. Teed, M.D., 410 Highland, Ann Arbor*

**Wayne County**
R. H. Pino, M.D., 1553 Woodward, Detroit
Gaylord S. Bates, M.D., 1553 Woodward, Detroit
Henry A. Luce, M.D., 1553 Woodward, Detroit
R. L. Novy, M.D., 5057 Woodward, Detroit
Douglas Donald, M.D., 1553 Woodward, Detoit
A. E. Catherwood, M.D., 1553 Woodward, Detroit
T. K. Gruber, M.D., Eloise Hospital, Eloise
W. D. Barrett, M.D., 1553 Woodward, Detroit
J. M. Robb, M.D., 1553 Woodward, Detroit
R. M. McKean, M.D., 1553 Woodward, Detroit
Allan McDonald, M.D., 5057 Woodward, Detroit
H. J. Kullman, M.D., 1553 Woodward, Detroit
L. J. Hirschman, M.D., 7815 E. Jefferson, Detroit
E. D. Spalding, M.D., 5057 Woodward, Detroit
G. C. Penberthy, M.D., 1553 Woodward, Detroit
G. L. McClellan, M.D., 2501 W. Grand Blvd., Detroit
W. B. Cooksey, M.D., 62 W. Kirby Avenue, Detroit
C. E. Dutchess, M.D., Parke, Davis & Co., Detroit
E. A. Osius, M.D., 2799 W. Grand Blvd., Detroit
J. H. Andries, M.D., 1553 Woodward, Detroit
R. C. Jamieson, M.D., 1553 Woodward, Detroit
L. T. Henderson, M.D., 13038 E. Jefferson, Detroit
C. S. Kennedy, M.D., 10 Peterboro, Detroit
H. F. Dibble, M.D., 1553 Woodward, Detroit
S. W. Insley, M.D., 5057 Woodward, Detroit
P. L. Ledwidge, M.D., 1553 Woodward, Detroit
C. F. Brunk, M.D., 7815 E. Jefferson, Detroit
Wm. S. Reveno, M.D., 3001 W. Grand Blvd., Detroit
C. F. Vale, M.D., 1553 Woodward, Detroit
F. W. Hartman, M.D., 2799 W. Grand Blvd., Detroit
R. V. Walker, M.D., 1553 Woodward, Detroit
H. W. Plaggemeyer, M.D., 1553 Woodward, Detroit
C. E. Simpson, M.D., 74 W. Adams, Detroit
J. A. Kasper, M.D., 1151 Taylor Ave., Detroit

A. F. Jennings, M.D., 7815 E. Jefferson Ave., Detroit
L. J. Morand, M.D., 1553 Woodward, Detroit
C. K. Hasley, M.D., 1553 Woodward, Detroit
B. L. Connelly, M.D., 5057 Woodward, Detroit
*C. E. Lemmon, 1553 Woodward, Detroit*
*E. R. Witwer, M.D., 3839 Brush St., Detroit*
*L. W. Hull, M.D., 1553 Woodward, Detroit*
*John H. Law, M.D., 4160 John R. St., Detroit*
*Wm. P. Woodworth, M.D., 2501 W. Grand Blvd., Detroit*
*L. O. Geib, M.D., 3528 Van Dyke, Detroit*
*Wm. H. Honor, M.D., 2966 Biddle, Wyandotte*
*L. J. Gariepy, M.D., 16401 Grand River, Detroit*
*M. H. Hoffmann, M.D., Eloise Hospital, Eloise*
*Arch Walls, M.D., 12065 Wyoming, Detroit*
*S. E. Gould, M.D., Eloise Hospital, Eloise*
*H. B. Fenech, M.D., 10 Peterboro, Detroit*
*W. B. Harm, M.D., 5884 W. Vernor Highway, Detroit*
*F. A. Weiser, M.D., 1553 Woodward, Detroit*
*C. S. Ratigan, M.D., 22340 Michigan, Dearborn*
*Edward Cathcart, M.D., 1553 Woodward, Detroit*
*D. I. Sugar, M.D., 17 Brady St., Detroit*
*H. C. Hack, M.D., 3001 W. Grand Blvd., Detroit*
*B. H. Priborsky, M.D., 5057 Woodward, Detroit*
*H. K. Shawan, M.D., 1553 Woodward, Detroit*
*W. A. Chipman, M.D., 14902 Grand River, Detroit*
*C. J. Jentgen, M.D., 2501 W. Grand Blvd., Detroit*
*V. N. Butler, M.D., 3001 W. Grand Blvd, Detroit*
*E. D. King, M.D., 5455 W. Vernor Highway, Detroit*
*E. E. Martmer, M.D., 1553 Woodward, Detroit*
*J. B. Rieger, M.D., 1553 Woodward, Detroit*
*D. C. Somers, M.D., 8445 E. Jefferson, Detroit*
*R. J. Schneck, M.D., 1553 Woodward, Detroit*
*F. C. Witter, M.D., 2905 W. Grand Blvd., Detroit*
*W. N. Braley, M.D., 12897 Woodward, Detroit*
*R. A .C. Wollenberg, M.D., 1553 Woodward, Detroit*
*R. A. Johnson, M.D., 7815 E. Jefferson, Detroit*
*L. W. Shaffer, M.D., 1553 Woodward, Detroit*
*D. J. Barnes, M.D., Vet. Admin. Facility, Dearborn*
*F. H. Top, M.D., 1151 Taylor Ave., Detroit*
*A. V. Forrester, M.D., 16491 Woodward, Detroit*
*Wm. Hamilton, M.D., 13836 Woodward, Highland Park*
*A. H. Bracken, M.D., 13102 W. Warren, Dearborn*

**Wexford**
W. Joe Smith, M.D., Cadillac
*John Gruber, M.D., Cadillac*

## SUPPLEMENTARY ROSTER

The following members were certified to the Secretary of the Michigan State Medical Society after the Roster which appeared in the May issue of THE JOURNAL had gone to press.

### Alpena-Alcona-Presque Isle
Trudeau, J. M.....Rogers City

### Berrien County
Frederickson, H. C.....Buchanan

### Clinton
Henthorn, A. C.....St. Johns

### Dickinson-Iron
MacEachran, Hugh.....Iron Mountain
Walker, Claude.....Iron Mountain

### Genesee
Burnell, B. E.....Flint
Graham, Hugh.....Mt. Morris
Van Gorder, George.....Davison
White, Perry.....Clio

### Gogebic
Pierpont, D. C.....Ironwood

### Houghton-Baraga-Keweenaw
Aldrich, L. C.....Hancock
Wickliffe, T. P.....Calumet

### Ionia-Montcalm
Botting, A. E.....Portland
Robertson, Perry C.....Ionia

### Jackson
Myers, J. H.....Jackson

### Kalamazoo
Brown, I. W.....Kalamazoo
Hobbs, E. J.....Galesburg

### Kent
Diamond, F. J.....Ravenna
Gibbs, Floyd.....Grand Rapids
Houghton, G. D.....Caledonia
Lavan, John.....Toledo, Ohio
Rasmussen, Leo.....Grand Rapids
Smith, Edwin M.....Grand Rapids

### Lenawee
Claflin, G. M.....Adrian
Growt, B. H.....Addison
Lennox, A. L.....Adrian
McCue, F. J.....Hudson
Rogers, J. D.....Adrian

### Marquette-Alger
Drury, Charles.....Marquette
Howe, L. W.....Marquette
Sicotte, I.....Ishpeming
Vandeventer, V.....Ishpeming

### Mason
Hoffman, H. B.....Ludington
Kirwan, E. J.....Ludington
Ostrander, R. A.....Ludington

### Monroe
Moriarty, Walter.....Monroe

### Newaygo
Johnstone, K. T.....Grant

### Oakland
German, Frank D.....Pontiac

### Oceana
Jensen, V. W.....Shelby

### Ottawa
House, M. E.....Holland
Tappan, W. M.....Holland

### St. Joseph
Porter, C. G.....Centerville

### Van Buren
Diephuis, Bert.....South Haven
Greenman, N. H.....Decatur

### Washtenaw
Barnwell, John.....Ann Arbor
Barr, Albert S.....Ann Arbor
Curtis, Arthur C.....Ann Arbor
Emerson, Herbert W.....Ann Arbor
Farris, Jack M.....Ann Arbor
Field, Henry, Jr.....Ann Arbor
Gates, Neil A., Jr.....Ann Arbor
German, James W.....Ypsilanti
Hammond, George.....Ann Arbor
Hammond, George W.....Ann Arbor
Himler, Leonard E.....Ann Arbor
Howes, Homer A.....Ann Arbor
Malamud, Nathan.....Ann Arbor
Raphael, Theophile.....Ann Arbor
Riggs, Harold W.....Ann Arbor
Snow, Glenadine.....Ypsilanti
Waldron, Alexander M.....Ann Arbor

### Wayne
Altman, Raphael.....Detroit
Axelson, A. U.....Detroit
Balaga, Frank T.....Detroit
Bates, Gaylord S.....Detroit
Bogusz, Ladislaus.....Eloise
Broudo, Philip H.....Detroit
Brownell, Paul G.....Detroit
Carroll, Elmer H.....Detroit
Conley, L. C. M.....Detroit
Cotton, Schuyler O.....Detroit
Dunn, Cornelius E.....Detroit
Fenner, W. A.....Detroit
Forrester, Alex V.....Detroit
Fowler Wm.....Detroit
Garner, H. B.....Detroit
Gemeroy, Joseph C.....Detroit
Hanser, Joshua.....Detroit

*(Continued on Page 478)*

# MICHIGAN'S DEPARTMENT OF HEALTH

HENRY A. MOYER, M.D., Commissioner, Lansing, Michigan

## 50,000 CASES OF MEASLES

Measles cases reported to the Michigan Department of Health by the end of April totaled more than 50,000. Comparisons for the 1941 epidemic and those of 1938 and 1935 follows:

| | | |
|---|---|---|
| Jan.-Apr., | 1935 | 47,955 |
| Jan.-Apr., | 1938 | 53,226 |
| Jan.-Apr., | 1941 | 53,172 |

In both the previous two epidemics, the cases at the end of the year totaled 80,000, and so it is quite possible that as many cases will be reported this year. Cases are being reported from all parts of the state, with Detroit reporting almost a third of the total in March and April. The figures for the two months are: March, Detroit 5,187, rest of state 13,821, total 19,008; April, Detroit 4,028, rest of state 14,141, total 18,169.

Although the reported number of cases of measles is about the same as in 1938, it is likely that this year individual protection for babies and young children has been better than in the last epidemic. Physicians in many instances are finding immune globulin useful in making an attack of measles shorter and lighter. If the attack is modified successfully, complications are rare, and it is the complications that cause most measles deaths. Whether or not to give the protecting treatment be left to the judgment of the physician. To be effective, it must be given by the eighth day after exposure to a case of measles, which is before symptoms develop.

## COMMUNICABLE DISEASE COMPARISON

Reported cases of certain communicable diseases for the first three months of the year show only two diseases to be appreciably higher than for the first quarter of 1940. These are measles and whooping cough. Lobar pneumonia continued low, scarlet fever and tuberculosis were both down and syphilis and gonorrhea were about the same.

The figures for twelve communicable diseases follow:

| | First Quarter of Year 1941 | 1940 |
|---|---|---|
| Lobar pneumonia | 1,014 | 1,089 |
| Tuberculosis | 1,088 | 1,311 |
| Typhoid fever | 27 | 23 |
| Diphtheria | 66 | 81 |
| Whooping cough | 4,213 | 1,569 |
| Scarlet fever | 3,037 | 3,959 |
| Measles | 35,003 | 3,534 |
| Smallpox | 32 | 7 |
| Meningitis | 10 | 16 |
| Poliomyelitis | 11 | 8 |
| Syphilis | 2,201 | 2,432 |
| Gonorrhea | 1,628 | 1,636 |

## KAHN TESTS SET NEW RECORD

Blood tests for syphilis are at new high monthly totals for Michigan. The total for March for public and private laboratories was 89,002, a record. The previous high was 85,782 in October.

Michigan Department of Health laboratories are making more Kahn tests than ever before, the increase being due largely to work done for Selective Service


*For the local Treatment of Acute Anterior* **Urethritis**

(DUE TO NEISSERIA GONORRHEAE)

SILVER PICRATE*

Wyeth

*Silver Picrate*, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by Neisseria gonorrheae.[1] An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

*A complete technique of treatment and literature will be sent upon request*

*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA

in the Lansing and Grand Rapids laboratories of the Department.

**For the first three months of the year, the Department's Kahn tests were at higher levels than ever before, and the March total of 36,539 exceeded the total tests made in private laboratories for the first time since comparative records have been available. Private laboratories performed 32,940 Kahn tests in March and city health department laboratories aided by state funds made 19,523 tests. In the previous high month of October, the totals were: State Health Department laboratories 18,443, subsidized city health department laboratories 18,143, private laboratories 49,196.**

## MARRIAGES INCREASE 23 PER CENT

After a two-year slump in weddings, marriages showed a 23 per cent gain in 1940. The total was 46,342, compared with 37,725 in 1939 and 30,105 in 1938. The gain of 23 per cent was the third largest percentage increase in marriages since the 37 per cent gain in 1919, when American soldiers returned from France and from cantonments.

"Industrial booms and the approach of the draft were undoubtedly an influence in the increase in marriages, particularly in the second half of the year," said Commissioner Moyer.

## SAGINAW SURVEY FINDS ELEVEN NEW CASES

Eleven previously unrecognized cases of tuberculosis were discovered recently in a week's case-finding program at Saginaw, sponsored by the city health department and endorsed unanimously by the Saginaw County Medical Society. The area covered was the city's first ward, where in the last five years, 45 out of Saginaw's 148 tuberculosis deaths had occurred.

Films were read by Dr. George A. Sherman, director of the Department's Bureau of Tuberculosis Control, and a nearly complete check of the work shows these clinically significant results:

| | |
|---|---|
| Minimal cases | 7 |
| Moderately advanced | 3 |
| Far advanced | 1 |

The photo x-ray truck was placed at a fire station for the case-finding, and efforts were made to get a chest film for every person in the ward over ten years of age. The population of the first ward is about 5,000, and 1,000 films four by five inches were made. It is believed that two-thirds of the persons eligible came to the truck for x-rays.

Families living in this ward are largely Mexican and Negro and the eleven cases found were in these races. (All of the 45 tuberculosis deaths in the ward in the last five years were among Mexican and Negro persons.)

## HAY FEVER IMMUNITY TREATMENTS

Hay fever sufferers who are relieved by immunity treatments have been reminded by the Michigan Department of Health that now is the time to see their physician. In a newspaper release at the end of April, the following paragraph appeared:

"Immunity to pollens that cause hay fever can often be built up by injections given just under the skin by a physician. The doses are usually gradually increased, and most doctors like to start them two or three months before the protection is needed. For those whose hay fever is due to ragweed pollen, the most common cause, immunizing injections should begin now, since the ragweed season starts in August."

## SAFE WATER

Physicians in Michigan who had a part in the campaigns of past years for safe public water supplies will be interested in knowing that such campaigns are still being made. Litchfield, a Hillsdale county village of 717, recently voted 197 to 55 to bond for $30,000 as the sponsor's share of a $73,000 WPA project which will provide a water works system, with well, pumping station, elevated tank and mains. The proposal had previously been rejected, late in 1940, but an energetic civic campaign brought about a four to one favorable vote in March.

No incorporated place of 1,000 or more population in the state is without a public water supply, but smaller towns are still building water systems or improving the ones they have.

## MATERNAL MORTALITY AT NEW LOW

Michigan's maternal mortality rate for 1940 is the lowest the state has known. The figure is 2.92 deaths per 1,000 live births, compared with 2.97 in 1939, and 6.04 in 1930.

Maternal deaths in 1940 totaled 290, in connection with 99,139 births. In 1939 there were 280 maternal deaths and 94,432 births.

"Substantial improvement in the maternal death rate has come about only in the last ten years," Commissioner Moyer said. "In 1930 the rate of 6.04 was little better than it was ten or even 20 years before. A decline in the rate which started in 1930 has continued ever since, and the rate now is half what it was ten years ago.

"With the present emphasis of the medical profession on postgraduate education and higher standards of medical care, we can expect that the maternal rate will go even lower in the future."

Previously, a new low infant mortality record had been announced for 1940. The rate was 40.7 deaths of infants under a year old per 1,000 live births. The 1939 infant death rate was 41.9.

## PONTIAC DEPARTMENT IN NEW LOCATION

The Health Department of the City of Pontiac has moved from the Pontiac General Hospital to a more central location in the downtown Hubbard Building. This move should prove advantageous to the physicians in Pontiac, as well as to the public.

## EXAMINATION FOR ASSISTANT SURGEON

*The next examination for Assistant Surgeon* in the regular Navy will be held at all major Naval Medical Department Activities on August 11 to 15, inclusive, and for Acting Assistant Surgeon on June 23 to 26 inclusive. Students in class "A" medical schools who will complete their medical education this year are eligible to apply for these appointments, and if successful will receive their appointments approximately two months after the date of the examination. A circular of information listing physical and other requirements for appointment as Acting Assistant Surgeon, subjects in which applicants are examined, application forms, etc., may be obtained from the Bureau of Medicine and Surgery, Navy Department, Washington, D. C., upon request.

# Woman's Auxiliary

**Bay County**

The Woman's Auxiliary to the Bay County Medical Society held its annual meeting and election of officers at the Wenonah Hotel on March 12.

Mrs. W. R. Ballard was re-elected president; Mrs. G. M. Brown, president-elect; Mrs. W. S. Stinson, vice president; Mrs. K. A. Alcorn, secretary; Mrs. Paul DeWaele, corresponding secretary; and Mrs. H. M. Gale, treasurer.

The group decided to elect the officers for a two-year term in the future.

Mrs. P. R. Urmston was chairman of the nominating committee, assisted by Mrs. R. C. Perkins and Mrs. E. S. Huckins.

Annual reports for 1940 were given by the secretary, Mrs. C. W. Reuter and the treasurer, Mrs. H. M. Gale.

Since we have a good balance in our treasury, we are planning to donate some money to the American Red Cross and a local organization—the amounts to be decided at our April meeting. Mrs. F. T. Andrews was appointed to look into the matter and report at the next meeting.

The members made tentative plans to entertain the Saginaw and Midland auxiliaries in May. The president is appointing a committee to take charge of this party.

Mrs. F. V. Kowals, a guest, was introduced as a prospective new member.

Dr. P. R. Urmston, President of the Michigan State Medical Society, addressed the Auxiliary. He gave a detailed account of the work of the county and city health departments and discussed current medical legislation with special reference to medical care to the indigents and low income groups.

There were twenty-one present at the meeting.

Mrs. J. Norris Asline.

* * *

At the meeting on April 9, 1941, at the Wenonah Hotel, eighteen were present at dinner which was followed by a business meeting and program.

Mrs. W. R. Ballard, who was recently reëlected president of the Auxiliary, presided and announced appointments of committees for the coming year.

Mrs. Kenneth R. Stuart was appointed treasurer to fill the vacancy created by the resignation of Mrs. H. M. Gale, who has held the office for several years. Mrs. Gale was presented with a corsage.

Tuesday, May 13, 1941, was chosen as the date to entertain the members of the Saginaw and Midland auxiliaries as well as guests from nearby small towns at a tea to be held at the Bay City Country Club.

Mrs. W. S. Stinson presented the program and Mrs. Virgil Schultz gave an interesting review of Ernest Hemingway's book "For Whom the Bell Tolls."

Dr. F. T. Andrews invited the auxiliary members to take part in the all-day Mental Hygiene insti-


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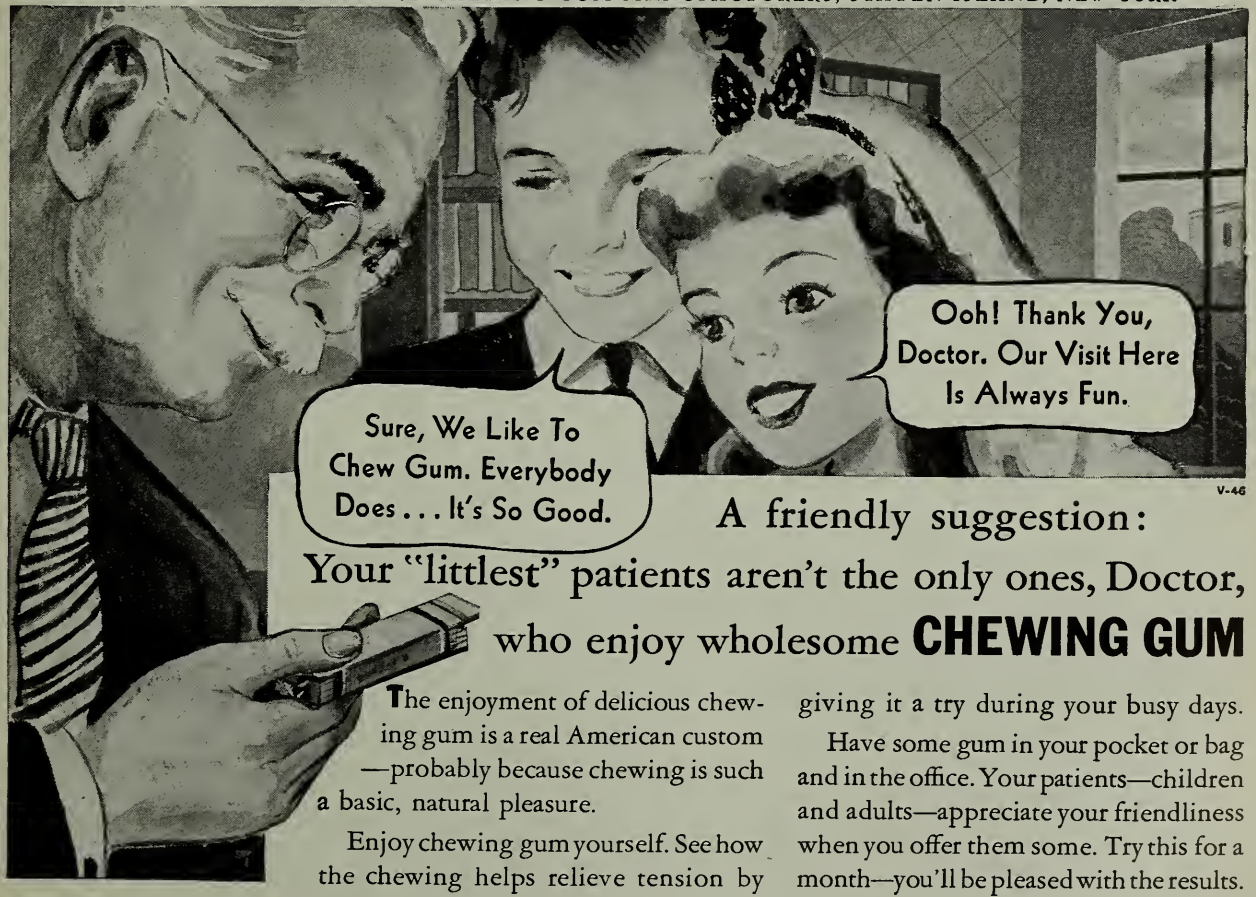


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tute to be held in Bay City on April 30, 1941, at the Wenonah Hotel and Dr. L. Fernald Foster explained the Michigan seal sale campaign for crippled children in which the auxiliary has taken part. —Mrs. Paul L. DeWaele.

**Genesee County**

The regular meeting of the Woman's Auxiliary of the Genesee County Medical Society was held on March 18 at Hurley Nurses Home. The board meeting was followed at 1:30 p. m. by the regular meeting with about 35 members present.

The meeting was in charge of Mrs. B. F. Sniderman, chairman of program for the day. She presented Dr. Ray Morrish who gave a very interesting talk on Public Relations. Following this the president Mrs. J. H. Curtin called the business meeting to order and minutes from the last meeting and the board meeting were read and approved. Reports of standing committees were then read and approved. The nominating committee submitted the following slate: President, Mrs. W. B. Hubbard; President-Elect, Mrs. Stephen Gelenger; Vice President, Mrs. Lafon Jones; Secretary, Mrs. Hira Branch; Treasurer, Mrs. B. A. Schiff.

The proposed slate was unanimously elected and the newly elected officers installed.

A gift was presented to Mrs. Curtin, the retiring president, and the business meeting adjourned. Tea followed with Mrs. W. P. Boles and Mrs. James Rowley presiding at the tea table centered with spring flowers in yellow and red and tall ivory tapers.

Mrs. Stephen Gelenger was chairman of the day assisted by the following committee, Mesdames Eugene Smith, James Rowley, W. P. Boles, Harold Woughter, Frank Baske, Geo. Anthony, Floyd Steinman and Fleming Barber.—Bernice R. Wright.

**Genesee County (Contd.)**

A board meeting of old and new members preceded the luncheon at the Flint Tavern, April 22. Mrs. O. J. Preston was in charge of the program featured with an address by Dr. L. O. Shantz, who spoke on "Medical Economics."

Mrs. W. B. Hubbard, president of the auxiliary, named the following new board: Membership, Mrs. D. R. Brasie; Social; Mrs. Arthur Kretchmar; Program, Mrs. Preston; Courtesy, Mrs. K. R. Sandy; Press, Mrs. N. A. Gleason; Welfare, Mrs. George Anthony; Finance, Mrs. T. S. Conover; Legislation and Health, Mrs. Gordon Willoughby; Telephone, Mrs. Frank Ware; Historian, Mrs. Harold Woughter; Auditing, Mrs. Henry Cook and Mrs. F. E. Reeder; Revision, Mrs. C. W. Colwell; Health Magazine, Mrs. E. C. Smith; Red Cross, Mrs. Alvin Thompson and Mrs. James Olson; British Relief, Mrs. Arthur McArthur and Mrs. Isadore Gutow; National Bulletin, Mrs. J. H. Curtin; Parliamentarian, Mrs. M. E. Chandler.

Plans were discussed for Red Cross and British relief projects and announcement was made of a joint meeting to be held with the Genesee County Medical Society at Hotel Durant, Tuesday, May 27, when Dr. Preston Bradley, Chicago, pastor of the People's Church, will be the speaker—(Mrs. N. A.) Margaret A. Gleason.

**Houghton-Keweenaw-Baraga Counties**

The monthly meeting of the Ladies' Auxiliary to the Houghton-Keweenaw-Baraga County Medical Society met at the Miscowaubik Club, Calumet, April 1. A business meeting, presided over by Mrs. T. P. Wickliffe, was devoted to a discussion of plans for the Tea and Style Show for the benefit of the Copper Country

Sanatorium to be held at the Calumet Armory, April 19th.

Mrs. A. B. Aldrich was chairman of the committee in charge of the Style Show and Mrs. A. C. Roche was in charge of arrangements for the Tea.

The program for the meeting was a review of the, "Life and Work of a Woman Surgeon," by Rosalie Slaughter Morton, delightfully interpreted by Mrs. L. E. Coffin.

**Ingham County**

The Ingham County Medical Auxiliary held its April meeting Monday the 21st, at the home of Mrs. F. J. Cushman. Our principal speaker of the afternoon was the State Commander of the Women's Field Army for the Control of Cancer, Mrs. John Wierango of Grand Rapids. Mrs. Wierango gave the history of this organization and outlined their extensive program. The members were given the opportunity to join the Cancer Control Army and thus promote their work for payment of dues.

The second speaker of the afternoon was Mrs. Cameron Murdock of Kalamazoo, who gave a most interesting talk on Tahiti where she had spent a year gathering material for a book; the talk was illustrated with beautiful artist's drawings of natives, their homes and customs.

For our active Red Cross work, we voted to assume the payment for, and making of, Ingham County's entire quota of obstetrical units for England. This assignment which consists of some 1400 items, was under the direction of Mrs. William J. Cameron. We are happy to report that this large project has been completed and is packed awaiting shipment.

The auxiliary invited the wives of visiting doctors attending the Society's annual clinic on May 1, for dinner and evening entertainment at the Country Club of Lansing.—Margaret S. Davenport.

**Jackson County**

The regular monthly meeting of the Medical Auxiliary to the Jackson County Medical Society was held Tuesday evening March 18 at the home of Mrs. T. E. Schmidt. A delicious dinner was served to forty-two members by the following committee: Mesdames John Smith, C. S. Clark, D. W. Smith, J. W. Speck, S. Sugar, C. W. Schepler, J. H. Myers, G. D. Culver, L. L. Stewart, and J. W. Townsend.

Mrs. N. M. Stewart, chairman for the evening, presented Mrs. Osmar Gallinger of Hartland, Michigan, who gave a very interesting illustrated lecture on weaving. This old American custom is being revived and Mrs. Gallinger invited the members to come to Hartland and learn to weave.

The next meeting of the Auxiliary will be held May 20 at the home of Mrs. M. J. McGlaughlin and Mrs. Charles Dengler will give her revue of Jenny Lind.

**Kalamazoo County**

Miss Pearl Schoolcraft, principal of the North Westnedge Avenue School was the speaker at the March meeting of the Women's Auxiliary to the Kalamazoo Academy of Medicine. Her subject was, "The Value of a Flexible Program in Our Schools."

Mrs. B. A. Shepard was the hostess, assisted by Mrs. John Fopeano and Mrs. Wm. Kavanaugh. The twenty-five members present enjoyed a most delightful dinner. Spring flowers were used for decorations.

* * *

The April meeting was held at the home of Mrs. John Volderauer. Mrs. Ralph Cook and Mrs. Roscoe Hildreth assisted the hostess.

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A coöperative dinner was enjoyed by the thirty members present. Following the business meeting, bridge was played.—(Mrs. G. H.) Frances Rigterink.

**Kent County**

Seventy-five members of the Woman's Auxiliary to the Kent County Medical Society attended the annual tea which was held on April 9 at the lovely home of Mrs. Reuben Maurits.

During the afternon, Mrs. Leo J. Dornbos, pianist, Mrs. Donald D. Armstrong, mezzo-soprano, and Mrs. Kenneth R. Edwards, harpist, entertained with a most delightful program.

We are happy to have as honor guests, Mrs. Roger V. Walker, State Auxiliary President, and Mrs. H. L. French, Treasurer of the State Organization.

On May 14, the Auxiliary will hold the annual luncheon meeting at Kent Country Club. Arrangements are in charge of Mrs. A. B. Thompson, Jr., assisted by Mrs. Carl Snapp. Our guest speaker will be Dr. P. L. Thompson, president of the Kent County Medical Society.—(Mrs. R. S.) Elizabeth Van Bree.

**Wayne County**

The April meeting of the Woman's Auxiliary to the Wayne County Medical Society was held on April 18, at the Society's Club rooms.

Following the business meeting a program on "Gardens and Gardening" was presented by Mrs. Patricia Roberts, assisted by Miss Violet Hodges.

During the program various arrangements of flowers were made which were presented to members of the audience. A most pleasant and instructive afternoon was enjoyed by everyone present.—Margaret Wallace.

## SUPPLEMENTARY ROSTER

### Wayne County

*(Continued from Page 472)*

Henderson, James L.....Detroit
Kasabach, V. Y.....Detroit
Kasper, Joseph A.....Detroit
Knapp, Floyd B.....Detroit
Kraft, Raymond B.....Detroit
Kuhn, Richard F.....Detroit
Lampman, Harold H.....Detroit
Leipsitz, Louis S.....Detroit
Levitt, Edward J.....Detroit
Madsen, Martha.....Eloise
Mair, Harold U.....Detroit
Martin, Wm. C.....Detroit
McMahon, Gerald H.....Detroit
Myers, George P.....Detroit
Noth, Paul H.....Detroit
Reed, Ivor E.....Detroit
Robbins, Edward R.....Detroit
Roth, Edward T.....Detroit
Schmidt, Harry E.....Detroit
Scott, James W.....Detroit
Shankwiler, Reed A.....Detroit
Spero, Gerald D.....Detroit
Sugar, David I.....Detroit
Walters, Albert G.....Detroit
Weiss, Joseph G.....Detroit
Wells, Martha .....Detroit
Weston, Earl E.....Detroit

### Wexford-Missaukee

Carrow J. F.....Marion

*Correction.*—The name of *Frank D. German, M.D.*, Pontiac, who is a member of the Oakland County Medical Society, was inadvertently omitted from the Roster of MSMS members published in the May issue of The Journal.

*Charles C. Merkel, M.D.*, should have been listed from *Grosse Pointe Farms* instead of Grosse Pointe in the Roster.



*Say you saw it in the Journal of the Michigan State Medical Society*

# In Memoriam

**Charles W. Edmunds, M.D.,** of Ann Arbor, was born in Bridport, Dorset, England, on February 22, 1873, and was graduated from the University of Michigan Medical School in 1901. Doctor Edmunds had been on the University of Michigan faculty since 1902 and was professor and chairman of the department of materia medica and therapeutics since 1907. From 1913 to 1921 he was assistant dean of the University Medical School. He was the oldest member of the medical school faculty in years of service. Doctor Edmunds died March 1, 1941.

* * *

**Maxwell Nathaniel Frank,** of Detroit, was born in New York City forty-seven years ago. He was graduated from the Detroit College of Medicine and Surgery in July, 1917. After graduation, Doctor Frank located in Detroit where he practiced medicine for twenty-five years. Doctor Frank died in Miami Beach, Florida, on April 1, 1941, of injuries received in an automobile accident several months previously.

* * *

**Edwin B. Forbes,** of Detroit, was born in Lowell, Mass., in 1874, and was graduated from the Harvard Medical School in 1898. A long-time practitioner in Detroit, Doctor Forbes was associated with the L. A. Young Industries and had served as County Physician for eight years. During the World War, he was medical officer of the 55th Infantry, holding the rank of Major. He died April 15, 1941.

* * *

**P. R. Hungerford,** of Concord, was born March 12, 1875, in Marshall, Michigan, and was graduated from the University of Michigan Medical School in 1902. He served as president of the Jackson County Medical Society in 1929. Despite the handicaps from a parathyroid tetany which developed some twelve years ago, Dr. Hungerford maintained a general practice in Concord and availed himself of every opportunity to take postgraduate work at the University of Michigan and was a constant attendant at the spring and fall clinics conducted by the state society, as well as county medical and staff meetings. Dr. Hungerford died May 3, 1941.

* * *

**W. Paul Petrie,** of Caro, was born December 25, 1899 at Fairview, Kentucky, the son of the late Dr. and Mrs. William S. Petrie, and was graduated from the Vanderbilt University, Nashville, Tennessee, in 1925. He took his internship at Hillman Hospital, Birmingham, Alabama, and later became resident physician at Grace Hospital in Detroit. In 1928 Doctor Petrie located in Caro where he remained until the time of his death.

Doctor Petrie was secretary of Tuscola County Medical Society in 1939 and in 1941 served as its president. He was the first Caro physician to serve on the Draft Board for Army induction. He was a member of the Caro school board, a charter member and past president of the Exchange Club and was active in many other organizations. He died May 14, 1941.

* * *

**Eugene Smith, Jr.,** of Detroit, was born in 1887 in Detroit and was graduated from the Detroit College of Medicine in 1912. He specialized in eye, ear, nose and throat work. In 1915, Doctor Smith


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became medical examiner for the civil service commission, a position he held until the time of his death. During the World War, he was attached to Base Hospital Unit 36, served in France as a Medical Corps major and held a commission as lieutenant-commander in the Naval Reserve. He was a member of the staffs of Woman's Hospital and St. Mary's Hospital. He died May 20, 1941.

* * *

**L. H. Stewart,** of Kalamazoo, was born in Kent County, near Grand Rapids on January 9, 1858. He was educated at Kalamazoo College and was graduated from the University of Michigan Medical School in 1897. Doctor Stewart served as a member of the board of trustees of Kalamazoo College from 1911 until the time of his death; as a member of Kalamazoo township board of education for four years. For his services he was awarded an honorary doctor of science degree from the Kalamazoo College. He had charge of the SATC medical work during the World War. Dr. Stewart served as president of Kalamazoo Academy of Medicine in 1918. He died April 21, 1940.

* * *

**Arthur E. West,** of Kalamazoo, was born in Nebraska, May 24, 1873. He was graduated from the University of Michigan Medical School in 1897 and took postgraduate work in Urology in New York. He located in Kalamazoo, where he practiced for thirty years. He had been a patient in Bronson Hospital for three months before his death on April 22, 1941.

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# ✶ COUNTY AND PERSONAL ACTIVITIES ✶

**100 per cent Club for 1941**

| | |
|---|---|
| Allegan | Menominee |
| Barry | Muskegon |
| Clinton | Oceana |
| Dickinson-Iron | Ontonagon |
| Eaton | Ottawa |
| Huron | Saginaw |
| Ingham | Saint Clair |
| Jackson | Sanilac |
| Lapeer | Shiawassee |
| Lenawee | Tuscola |
| Luce | Wexford-Missaukee |
| Manistee | |

The above County Medical Societies have certified 1941 membership for all of their 1940 members. Several more societies are not on the 100 per cent roll because of only one delinquent member.

*Pontiac General Hospital* has started its one hundred thousand dollar building program, which will add much needed bed space for Pontiac.

* * *

*M. M. Jones, M.D.*, Pontiac, addressed the Macomb County Medical Society at its meeting of April 22 on the subject of "The Value of Version in the Management of Persistent Posterior Occiput Cases."

Twenty-five Michigan physicians attended the Seminar on Psychiatric Problems in connection with the physical examination of draftees which was held in Chicago on Monday and Tuesday, May 19 and 20.

* * *

*Graduate course* in electrocardiography for physicians will be given at Michael Reese Hospital, Chicago by Louis N. Katz, M.D., from August 18 to August 30. Write Michael Reese Hospital, Cardiovascular Department, 29th and Ellis Avenue, Chicago, for further information.

* * *

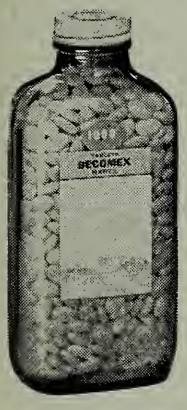
*Alexander M. Campbell, M.D.*, Grand Rapids, maternal health consultant of the Michigan Department of Health in coöperation with the Michigan State Medical Society, has been appointed Chairman of a State Committee to prepare for the Second American Congress on Obstetrics and Gynecology, sponsored by the American Committee on Maternal Welfare.

* * *

Selective Service State Headquarters announce that they will supply speakers on the psychiatric phase of the physical examination of draftees, as well as other points in connection with the physical examination, to any County Medical Society which is interested. Write Lt. Colonel Harold A. Furlong, Selective Service State Headquarters, Lansing, Michigan.

* * *

*The Wayne County Medical Society's* Entertainment Committee has circularized the members of their Society concerning the interest in a WCMS Cruise over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the week-end of June 20 to June 23. The announcement says: "Music, games, contests, special entertainment. A SEVERE PENALTY FOR ANYONE 'TALKING SHOP.'"

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*Doctor, remember your particular friends,* the exhibitors, at your annual convention, when you have need of equipment, appliances, medical supplies, and service. Here are more of the firms which helped make the 1940 Convention such a success:

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The Borden Company, New York
Barry Allergy Laboratory, Inc., Detroit
Bard-Parker Company, Danbury, Connecticut
The Baker Laboratories, Cleveland
The Arlington Chemical Company, Yonkers, New York
A. S. Aloe Company, St. Louis, Missouri
Abbott Laboratories, Chicago.

* * *

*A Mental Hygiene Conference* sponsored by the Michigan Society for Mental Hygiene and the State Hospital Commission was held at the Traverse City State Hospital on May 22-23, 1941. Among the speakers on the program were Governor Murray D. Van Wagoner, Paul V. Lemkau, M.D., Baltimore; Edgar C. Yerbury, M.D., Boston; and George S. Stevenson, M.D., New York.

* * *

*C. J. Smyth, M.D., R. H. Freyberg, M.D., and W. S. Peck, M.D.,* of Ann Arbor are the authors of "Roentgen Therapy for Rheumatic Disease" appearing in the *Journal of the AMA* for May 3, 1941.

"Grafts of Preserved Cartilage in Restorations of Facial Contour" by Claire L. Straith, M.D., and Wayne B. Slaughter, M.D., Detroit, also appeared in the same issue.

* * *

*Wm. J. Burns,* Executive Secretary of the MSMS, addressed the House of Delegates of the West Virginia State Medical Association in Charleston on May 12-13, on "Michigan Medical Service." On May 14, Mr. Burns also spoke on "Michigan Medical Service" at the 1941 Annual Meeting of the Homeopathic Medical Society of Michigan held in Grand Rapids.

* * *

*New Officers* for 1941-42 of the Michigan Society of Neurology and Psychiatry were elected at the annual meeting of the Society on April 24th as follows: President—P. V. Wagley, M.D., Pontiac; vice president—R. W. Waggoner, M.D., Ann Arbor; secretary-treasurer—David Leach, M.D., Detroit; councilors—Thomas J. Heldt, M.D., Detroit; and Martin H. Hoffmann, M.D., Eloise.

* * *

*Paul V. McNutt,* Federal Security Administrator, invited P. R. Urmston, Bay City, M.D., President of the Michigan State Medical Society, L. G. Christian, M.D., Lansing, AMA Delegate; Russell W. Bunting, M.D., Ann Arbor; Emory W. Morris, M.D., Battle Creek; L. H. Newburgh, M.D., Ann Arbor; C. D. Selby, M.D., Detroit; and Arthur H. Smith, M.D., Detroit, as Michigan delegates to the National Nutrition Conference for Defense which President Roosevelt called in Washington, May 26-27-28.

* * *

*Malpractice Prevention.*—Don't slight your records. Keep detailed notes and reports.

Don't operate without written consent.

Don't perform certain services (such as fractures) without x-rays or laboratory diagnosis.

Don't delegate important duties to unsupervised nurses and subordinates (such as x-ray treatments, intravenous injections, etc).

* * *

*Schistosome dermatitis* (Water Itch or Swimmer's Itch) is caused by the penetration through the skin of the larvæ of certain species of parasitic worms



*Say you saw it in the Journal of the Michigan State Medical Society*

called schistosomes. It results in severe itching and frequently is the ruination of a pleasant vacation. Swimmer's Itch is common in Michigan.

Infection can be avoided in one of the following ways: (1) Use care in selecting beaches to be used for swimming; (2) Confine swimming to deep water on infested beaches; (3) Rub off well with towel before the water has a chance to dry on the skin. This will remove most of the larvæ before they can penetrate.

The Stream Control Commission of the State of Michigan has printed an interesting booklet on "Water Itch" which is available by writing the Commission in the State Office Building, Lansing.

* * *

*The Providence Hospital Interne Alumni Association* held its Annual Spring Clinic on Thursday, May 15. Among the speakers on the one-day program were Willard O. Thompson, M. D., Chicago; George Crile, Jr., M.D., Cleveland; Benjamin Levine, M.D., Cleveland; and Rev. Alphonse M. Schwitalla, S. J., St. Louis, Mo. Golf and Field Day activities were enjoyed in the afternoon at West Shore Golf and Country Club at Grosse Ile, followed in the evening by dinner.

* * *

*The Northern Tri-State Medical Association* held its 1941 meeting at Tiffin, Ohio, on April 9. Officers for the ensuing year were elected as follows: Lyman R. Rawles, M.D., Fort Wayne, Indiana, President; E. Benjamin Gillette, M.D., Toledo, Vice President; F. R. N. Carter, M.D., South Bend, Indiana, Secretary; Douglas Donald, M.D., Detroit, Treasurer; and G. O. Larson, M.D., LaPorte, Indiana, H. E. Randall, M.D., Flint, O. P. Klotz, M.D., Findlay, Ohio, Howard H. Cummings, M.D., Ann Arbor, and Donald Cameron, M.D., Fort Wayne, Indiana, were elected Counsellors.

* * *

*A. Kuhlman and Company* of Detroit recently resurrected an antique letter from the Michigan State Medical Society signed by F. B. Marshall, M.D., of Muskegon, inviting them to participate as an exhibitor in the M.S.M.S. Annual Meeting of 1912 in Muskegon. Part of the letter read: "An unusually large attendance is expected at this meeting. A large number of people from all parts of the United States will be visiting Muskegon at that time (June), the beginning of the next resort season."

This interesting document has been in the Kuhlman files almost three decades!

* * *

*The Michigan Pathological Society's* April meeting was held in Flint, Michigan at the Hurley Hospital and Durant Hotel, jointly with the Genesee County Medical Society. C. W. Colwell, M.D., president of the Genesee County Medical Society, and J. A. Kasper, M.D., president of the Michigan Pathological Society, presided. The guest speaker, C. W. Apflebach, M.D., was introduced by W. H. Marshall, M.D. Dr. Apflebach's subject was "Tumors of the Lungs and Thoracic Cavity," illustrated by colored pictures. Cases representing "Tumors of the Respiratory System" were presented by Drs. Bond, Binford, Ahronheim, Backus and Kasper of the Michigan Pathological Society.

* * *

*Warning against driving* when taking sulfanilamide is contained in an article appearing in *The Journal of the AMA* issue of May 17. Physicians have ruled that airplane pilots must not fly until four days have elapsed after they have received any of the sulfonamide group. Patients engaged in mechanical work of any kind should not take sulfanilamide except when relieved of their responsibilities. Patients should


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be cautioned preferably to stay at home and at rest while taking the drug and not to drive an automobile, make an important decision or sign any papers while the drug is being administered. Physicians thus have a definite obligation when prescribing sulfanilamide.

## 1941 EXHIBITORS

Exhibitors at the 1941 Convention of the Michigan State Medical Society, to be held at the Civic Auditorium, Grand Rapids, September 17, 18, 19, 1941, include:

Abbott Laboratories.....North Chicago

Baker Laboratories.....Cleveland
Bard-Parker Company.....Danbury, Conn.
Barry Allergy Laboratory.....Detroit
Rudolph Beaver, Inc.....Waltham, Mass.
Otto K. Becker Company.....Huntington, W. Va.
Becton Dickinson & Co.....Rutherford, N. J.
Bilhuber-Knoll Corp.....Orange, N. J.
Ernst-Bischoff Co.....Ivoryton, Conn.
Borden Sales Company.....New York City
Burroughs-Wellcome Company.....New York City

Cameron Surgical Specialty Co.....Chicago
S. H. Camp & Company.....Jackson, Michigan
Ciba Company, Inc.....Summit, N. J.
Coca-Cola Company.....Atlanta, Ga.
Cottrell-Clarke, Inc.....Detroit
Cream of Wheat Corp.....Minneapolis
Cutter Laboratories.....Chicago

R. B. Davis Company.....Hoboken, N. J.
Davis & Geck, Inc.....Brooklyn, N. Y.
DePuy Manufacturing Co.....Warsaw, Indiana
Detroit Creamery Company.....Detroit
Detroit X-Ray Sales Co.....Detroit
Dictaphone Sales Corp.....Detroit
Dietene Company.....Minneapolis
Doho Chemical Corporation.....New York City
Duke Laboratories.....Stamford, Conn.

The Ediphone Company.....Detroit

H. G. Fischer & Company.....Chicago
C. B. Fleet Company.....Huntington, W. Va.

General Electric X-Ray Corp.....Chicago
Gerber Products Company.....Fremont, Michigan

Hack Shoe Company.....Detroit
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McKesson Appliance Company.....Toledo, Ohio
Mead Johnson & Company.....Evansville, Ind.
Medical Arts Surgical Supply Co.....Grand Rapids, Michigan
Medical Arts Physicians & Surgeons Supplies.....Detroit
Medical Case History Bureau.....New York City
Mellin's Food Company.....Boston
The Mennen Company.....Newark, N. J.
Medical Protective Company.....Fort Wayne, Ind.
Wm. S. Merrell Company.....Cincinnati
Michigan Health Service.....Detroit

C. V. Mosby Company.....St. Louis

National Live Stock & Meat Board.....Chicago
Nestle's Milk Products, Inc.....New York City

Parke, Davis & Company.....Detroit
Pelton & Crane Company.....Detroit
Pet Milk Company.....St. Louis
Petrolagar Laboratories.....Chicago
Phillip Morris Company.....New York City
Picker X-Ray Corporation.....New York City
Professional Management.....Battle Creek

Randolph Surgical Supply Co.....Detroit
Riedel-de Haen, Inc.....New York City

S.M.A. Corporation.....Chicago
Sandoz Chemical Works, Inc.....New York City
W. B. Saunders Company.....Philadelphia
Schering Corporation.....Bloomfield, N. J.
Scientific Sugars Company.....Columbus, Ind.
Sharp & Dohme.....Philadelphia
Smith, Kline & French Laboratories.....Philadelphia
E. R. Squibb & Sons.....New York City
Frederick Stearns & Company.....Detroit

U. S. Standard Products Co.....Woodworth, Wis.

Wall Chemicals Corp.....Detroit
Westinghouse X-Ray Company.....Long Island City, N. Y.
White Laboratories.....Newark, N. J.
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## READING NOTICES

### HISTORICAL NOTES ON MEAD'S CEREAL AND PABLUM

Hand in hand with pediatric progress, the introduction of Mead's Cereal in 1930 marked a new concept in the function of cereals in the child's dietary. For 150 years before that, since the days of "pap" and "panada," there has been no noteworthy improvement in the nutritive quality of cereals for infant feeding. Cereals were fed principally for their carbohydrate content.

The formula of Mead's Cereal was designed to supplement the baby's diet in minerals and vitamins, especially iron and $B_1$.

That the medical profession has recognized the importance of this contribution is indicated by the fact that cereal is now included in the baby's diet as early as the third or fourth month instead of at the sixth to twelfth month as was the custom only a decade or two ago.

In 1933 Mead Johnson & Company went a step further, improving the Mead's Cereal mixture by a special process of cooking, which rendered it easily tolerated by the infant and at the same time did away with the need for prolonged cereal cooking in the home. The result is Pablum, an original product which offers all of the nutritional qualities of Mead's Cereal, plus the convenience of thorough scientific cooking.

Many physicians recognize the pioneer efforts on the part of Mead Johnson & Company by specifying Mead's Cereal and Pablum.

### THE TRUE ECONOMY OF DEXTRI-MALTOSE

It is interesting to note that a fair average of the length of time an infant receives Dextri-Maltose is five months: That these five months are the most critical of the baby's life: That the difference in cost to the mother between Dextri-Maltose and common sugars is about $7 for this entire period—a few cents a day: That, in the end, it costs the mother less to employ regular medical attendance for her baby than to attempt to do her own feeding, which in numerous cases leads to a seriously sick baby eventually requiring the most costly medical attendance.

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## UPPER PENINSULA MEDICAL ASSOCIATION

**Ironwood, Michigan**

**July 17 and 18**

### PROGRAM

**Thursday, July 17, 1941**

*Morning Session*

9:00 Registration at Grand View Hospital

10:00 Welcome—W. E. Tew, M.D., President

Treatment of Varicose Veins—H. O. McPhetters, M.D., Minneapolis

Practical Application of Vitamin Therapy—C. Q. Weigand, M.D., Indianapolis

Excretory Urography in the Study of Urologic Disease—James C. Sargent, M.D., Milwaukee

12:15 Lunch at Grand View Hospital

*Afternoon Session*

1:30 Clinical Application of the Sulphonamide Group of Drugs—Francis D. Murphy, M.D., Milwaukee

X-ray in Acute Abdomen—Leo G. Rigler, M.D., Minneapolis

Surgical Subject—Chas. W. Mayo, M.D., Rochester, Minn.

Eye Injuries—Ralph Sproule, M.D., Milwaukee, President, Wisconsin State Medical Society

**Friday, July 18, 1941**

*Morning Session*

10:00 Rectal Diseases—Louis A. Buie, M.D., Rochester, Minn.

Industrial Backache—Paul B. Magnuson, M.D., Chicago

Practical Application of Hormone Therapy—S. C. Freed, M.D., Chicago

Business meeting.

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# THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

PROCTOLOGY FOR THE GENERAL PRACTITIONER. By Frederick C. Smith, M.D., M.Sc. (Med.); F.A.P.S.; Formerly Associate in Proctology, Graduate School of Medicine, University of Pennsylvania; Fellow, American Proctologic Society; Editor, The Weekly Roster and Medical Digest, Philadelphia County Medical Society; Editor, The Medical World; Lieutenant Colonel, Medical Reserve Corps, United States Army. Illustrated with 161 half-tones and line engravings and 5 color plates. Second revised edition. Philadelphia: F. A. Davis Company, 1941. Price: $4.50.

The title well indicates the scope of this volume. It describes the diagnosis and care of many pathological conditions and should be of great help in extending the physician's office practice. A number of conditions not usually associated with proctology are included when their main connection is with this anatomical area.

* * *

EMERGENCY SURGERY. By Hamilton Baily, F.R.C.S. (Eng.) Surgeon, Royal Northern Hospital, London; Surgeon and Urologist, Essex County Council; Surgeon, Italian Hospital; Consulting Surgeon, Clacton Hospital and the County Hospital, Chatham; External Examiner in Surgery, University of Bristol. Fourth edition with 390 illustrations, of which a large number are in color. A William Wood Book. Baltimore: The Williams and Wilkins Company, 1940. Price: $15.00.

This is the fourth edition of a book first published in 1930. It is typically English, giving great detail with an overwhelming number of drawings and photographs. It includes a number of conditions which are not essentially of an emergency nature but its inclusiveness should be welcome. Many of the figures are in color which adds to their clarity. The English viewpoint on some procedures is interesting and of value. For a complete discussion of emergency surgery it is recommended.

* * *

THE AVITAMINOSES. The Chemical, Clinical and Pathological Aspects of the Vitamin Deficiency Diseases. By Walter H. Eddy, Ph.D., Professor of Physiological Chemistry, Teachers College, Columbia University; Director, Bureau of Foods and Sanitation, "Good Housekeeping Magazine": and Gilbert Dalldorf, M.D., Pathologist to the Grasslands and Northern Westchester Hospitals, Westchester County, New York. Second edition. Baltimore: The Williams & Wilkins Company, 1941. Price: $4.50.

Originally published in 1937, this is the second edition and has been greatly enlarged. For the practitioner who graduated ten or more years ago this book presents the necessary information regarding the chemical, physiological and clinical aspects of the vitamin question in a complete but very readable and easily understandable manner. The experimental work and its application to clinical use is splendidly evaluated. It is highly recommended to any physician desiring scientific but practical information in treating this group of puzzling cases.

* * *

ROENTGEN INTERPRETATION. By George W. Holmes, M.D., Roentgenologist to the Massachusetts General Hospital and Clinical Professor of Roentgenology, Harvard Medical School; and Howard E. Ruggles, M.D., Late Roentgenologist to the University of California Hospital and Clinical Professor of Roentgenology, University of California Medical School. Sixth edition, thoroughly revised. Illustrated with 246 engravings. Philadelphia: Lea and Febiger, 1941. Price: $5.00.

For the roentgenologist and especially the physician who does not confine all his time to that specialty this well-illustrated volume should be of great value. The authors, who are top ranking roentgenologists, point out the common errors which are made in interpretation, the reason for the error, and the manner in which to avoid the incorrect reading. It is simply written and well organized.

* * *

FIRST AID IN EMERGENCIES. By Eldridge L. Eliason, A.B., M.D., Sc.D., F.A.C.S., Professor of Surgery, University of Pennsylvania School of Medicine; Professor of Surgery, University of Pennsylvania Graduate School of Medicine; Surgeon, University of Pennsylvania, Presbyterian, and Philadelphia General Hospitals. Tenth edition completely revised and reset. 126 illustrations. Philadelphia: J. B. Lippincott Company, 1941. Price: $1.75.

This is the tenth edition of the pocket-sized book first published in 1915. This edition has been entirely revised and the type reset and many new illustrations added. The author has avoided quite well the usual fault of this type of manual; namely, encouraging too much home medication and interference. This book would be a safe textbook for first aid classes.

* * *

AN INTRODUCTION TO DERMATOLOGY. By Richard L. Sutton, M.D., Sc.D., LL.D., F.R.S. (Edin.) Emeritus Professor of Dermatology, University of Kansas School of Medicine; and Richard L. Sutton, Jr., A.M., M.D., L.R.C.P. (Edin.) Assistant Professor of Dermatology, University of Kansas School of Medicine. With 723 illustrations. Fourth edition. St. Louis: The C. V. Mosby Company, 1941. Price: $9.00.

This is the fourth edition of this valuable textbook first published in 1932. In this edition the type has been reset, and the number of illustrations more than doubled. Excellent care and judgment have been shown in the illustrations and the completeness of the volume is almost unbelievable. Modern treatment is fully described and every aid is extended the practitioner in diagnosis and care of his patient. A very complete and well-arranged bibliography is an additional feature. This book is recommended to the practitioner who is more than ordinarily interested in the handling of this group of cases.

* * *

FOCUS ON AFRICA. By Richard Upjohn Light, Photographs by Mary Light. Foreword by Isaiah Bowman, President, The Johns Hopkins University. New York: American Geographical Society, 1941. Price: $5.00 ($3.00 to Fellows of the American Geographical Society).

Doctor Light of Kalamazoo, a well-known brain surgeon, in company with his wife flew his private plane over most of Africa in the winter of 1937-'38. The present economic and military interest in Africa makes the observations of Doctor Light regarding the political, agricultural, and economical problems of especial importance and interest to the medical reader. A new light is shown on this vast continent. The photography is superb and the selection of subjects well chosen. The running comment besides being instructive is exceedingly interesting.

* * *

THE ESSENTIALS OF APPLIED MEDICAL LABORATORY TECHNIC. Details of how to build and conduct an office or small hospital laboratory at small cost. By J. M. Feder, M.D., Director of Laboratories and Allergic Service, Anderson County Hospital, Anderson, S. C. Blood and Plasma Transfusion. By John Elliott, Sc.D., Pathologist Rowan General Hospital, Salisbury, N.C. Profusely illustrated. Two plates in colors. Charlotte, N. C.: Charlotte Medical Press, 1940.

For the scientifically inclined practitioner in the small town who envies the clinical laboratory facilities of his urban colleagues. Here is described the equipping and management of a small hospital or office laboratory at a minimum cost. It describes very much in detail how to make such apparatus as is usually thought prohibitive in price to the average physician. The book goes on to describe in great detail and with very intimate line drawings and pictures various laboratory procedures considered necessary in the modern practice of medicine.

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### In Retrospect

Prior to the organization of Michigan Medical Service, it was recognized that it was extremely difficult for citizens of the moderate income group to provide in their budgets for the payment of essential medical services required by their families and themselves. Accordingly, after exhaustive studies by the Michigan State Medical Society, the doctors of Michigan established Michigan Medical Service as an organization whereby they offered their services to the people of Michigan at amounts which would fit into their budgets, these payments being pooled in a common fund which would be used to pay the doctor for his services. This program provided a means for persons with limited incomes to avail themselves of medical and surgical service when necessary. The acceptance of this program is indicated by the state-wide enrollment of over 500 groups, totaling 40,000 workers and their families.

### Coöperation of Doctors

During the first thirteen months of operation, the funds received from subscribers were sufficient to pay benefits to doctors for services rendered in amounts equivalent to prevailing charges made to persons with moderate incomes of approximately $1,500.00 to $1,700.00 annually. This level was maintained, although the volume of services rendered exceeded that reported in any study of the amount of medical care required by groups of people. The increase applied to both medical and surgical services, the subscribers requesting treatment for conditions which had been long neglected and the correction of which resulted in their increased good health.

In the first four months of this year, the seasonal increase in medical care was emphasized by a considerable increase in influenza, measles, gastro-intestinal disorders, etc. During this period, there was also an increase in enrollment with the usual substantial volume of service for the first months the certificates went into effect. In view of this situation and in the interests of conservative management, payment for services rendered during the month of April was authorized on a level somewhat lower than that previously

*(Continued on Page 498)*

**MICHIGAN MEDICAL SERVICE REGISTRATION HONOR ROLL**
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Water, boiled ..... 10 ozs.
Karo syrup ..... 2 tbs.

Evaporated milk ..... 6 ozs.
Water, boiled ..... 12 ozs.
Karo syrup ..... 2 tbs.

Powdered milk ..... 5 tbs.
Water, boiled ..... 20 ozs.
Karo syrup ..... 2 tbs.

**ALLERGIC INFANTS**

Evaporated goat's milk .. 6 ozs.
Water, boiled ..... 12 ozs.
Karo syrup ..... 2 tbs.

Hypoallergic milk ..... 10 ozs.
Water, boiled ..... 10 ozs.
Karo syrup ..... 2 tbs.

Soybee ..... 8 tbs.
Water, boiled ..... 18 ozs.
Karo syrup ..... 2 tbs.

**NEUROPATHIC INFANTS**

Evaporated milk ..... 7 ozs.
Water, boiled ..... 13 ozs.
Barley flour ..... 3 tbs.
Karo syrup ..... 1 tbs.
(cooked ten minutes until thick)

Whole milk ..... 12 ozs.
Water, boiled ..... 6 ozs.
25% Lactic acid ..... 2 tsp.
Karo syrup ..... 2 tbs.

2% Lactic-acid milk .... 18 ozs.
Karo syrup ..... 2 tbs.

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| Maltose | 18% | | |
| Dextrose | 12% | 1 oz. wt. | 28 grams 90 cals. |
| Sucrose | 4% | | |
| Invert Sugar | 3% | 1 teaspoon | 20 cals. |
| Minerals | 0.6% | 1 tablespoon | 60 cals. |
| Moisture | 25% | | |

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*(Continued from Page 496)*

prevailing. With the seasonal decrease during the remaining period of the year and when new groups have passed their first months of service, it is expected that requests for services will decline to the usual level.

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## COUNTY MEDICAL SOCIETY MEETINGS

*Bay-Arenac-Iosco*—Wednesday, May 28—Bay City—Speaker: Mark F. Osterlin, M.D. Traverse City. Subject: "Tuberculosis in Children." Wednesday, June 18—Bay City—Ladies' Night.

*Berrien*—Wednesday, May 21—Niles—Speaker: John T. Reynolds, M.D., Chicago. Subject: "Fractures."

*Calhoun*—Tuesday, June 3—Battle Creek—Speaker: Pearl Kendrick, M.D., Grand Rapids. Subject: "Recent Research Work in the State Board of Health Laboratories."

*Dickinson-Iron*—Thursday, June 5—Iron Mountain—Speaker: William Lange, M.D., Detroit.

*Ingham*—Tuesday, June 17—Lansing—Speaker: Carl Badgley, M.D., Ann Arbor. Subject: "Backache."

*Jackson*—Tuesday, May 20—Jackson—Speaker: John T. Murphy, M.D., Toledo. Subject: "Bone Tumors."

*Kalamazoo*—Tuesday, June 17—Kalamazoo—Joint meeting with Woman's Auxiliary.

*Oakland*—Wednesday, June 4—Rotunda Inn—Speaker: Reed Nesbit, M.D., Ann Arbor. Subject: "Chronic Pyelonephritis."

*St. Clair*—Tuesday, May 27—St. Clair—Speakers: Herbert H. Hollman, M.D., Detroit and Arthur E. Schiller, M.D., Detroit. Subject: "New Ideas of Syphilis and Dermatology." Friday, June 20—St. Clair—Special meeting honoring legislators from St. Clair County.

*St. Joseph*—Thursday, June 12—Klinger Lake Country Club—Joint Meeting of Medical Society with dentists and druggists of the county. Colored movies of hunting trips were shown by C. E. Boys, M.D. of Kalamazoo.

*Shiawassee*—Thursday, June 19—Owosso—Speaker: Dr. Charles Kettering, Vice President of General Motors in Charge of Research, addressed the Society. He was accompanied by Dr. Walter Simpson, director of the Kettering Institute and Dr. W. Kendall, the assistant Director.

*Washtenaw*—Wednesday, June 25—Washtenaw Country Club—Joint meeting of the County Dental and Medical Societies.

*Wexford-Missaukee*—Thursday, May 29—Cadillac—State Society Program with the following speakers: Paul R. Urmston, M.D., Bay City; Wm. E. Barstow, M.D., St. Louis; Ed. F. Sladek, M.D., Traverse City; L. Fernald Foster, M.D., Bay City and Wm. J. Burns, Lansing.

## COUNCIL AND COMMITTEE MEETINGS

1. Wednesday, May 21, 1941, 3:00 p.m.—Postgradute Medical Education Committee, University Hospital, Ann Arbor.
2. Monday, June 9, 1941, 6:15 p.m.—Cancer Committee, Woman's League, Ann Arbor.
3. Thursday, June 12, 1941, 3:00 p.m.—Executive Committee of The Council, Hotel Olds, Lansing.
4. Friday, June 13, 1941, 12:30 p.m.—Representatives to Joint Committee on Health Education, Michigan Union, Ann Arbor.
5. Sunday, June 15, 1941, 6:00 p.m.—Syphilis Control Committee, Hotel Olds, Lansing.
6. Wednesday, June 18, 1941, 6:30 p.m.—Executive Committee of The Council, Hotel Olds, Lansing.
7. Thursday, June 19, 1941, 6:00 p.m.—Preventive Medicine Committee, Hotel Olds, Lansing.
8. Friday and Saturday, July 11 and 12, 1941—The Council, Mackinac Island.

## MICHIGAN PHYSICIANS REGISTERED AT THE CLEVELAND AMA MEETING

**Total—438**

Following is a list of the Michigan physicians who registered at the Cleveland AMA Convention. Names are listed in the order in which they appeared in the Daily Bulletins of the 92nd Annual Session:

*Monday:* Altshuler, Samuel S., Detroit; Aronstam, Noah E., Detroit; Ascher, Meyer S., Detroit.

Backus, G. R., Flint; Bader, Benjamin H., Detroit; Bartlett, Walter M., Benton Harbor; Beaver, Donald C., Detroit; Beebe, Irvin J., Morenci; Beeuwkes, Lambertus E., Dearborn; Behen, Wm. C., Lansing; Bentley, Neil, Detroit; Berman, Harry S., Detroit; Birkelo, C. C., Detroit; Bond, Geo. L., Grand Rapids; Brines, Osborne A., Detroit; Brink, J. Russell, Grand Rapids; Brisbois, Harold J., Plymouth; Broudo, Philip H., Detroit; Brunk, A. S., Detroit; Burley, D. H., Almont; Burley, J. H., Port Huron; Brush, Brock E., Detroit; Byrnes, A. W., Ft. Custer.

Caldwell, George H., Kalamazoo; Campbell, Alexander M., Grand Rapids; Carstens, Henry R., Detroit; Christian, L. G., Lansing; Christopoulos, D. G., Detroit; Colwell, C. W., Flint; Curtin, J. H., Flint.

Danforth, Mortimer E., Detroit; Doyle, F. M., Kalamazoo; Droock, Victor, Detroit; Duffie, Don H., Central Lake; Dutchess, Charles E., Detroit; Ferguson, Lynn A., Grand Rapids; Ferrand, L. G., Rockford; Fitzgerald, E. W., Detroit; Flynn, J. Donald, Grand Rapids; Foster, L. Fernald, Bay City; Frazer, Mary Margaret, Detroit.

Gould, S. E., Eloise; Green, Mervin E., Ann Arbor; Gruber, Thomas K., Eloise.

Hagele, Marie A., Lansing; Harkins, Henry N., Detroit; Hartwell, Shattuck W., Muskegon; Hasley, Clyde K., Detroit; Heath, Leonard P., Detroit; High, Anne L., Ann Arbor; Hirschman, Louis J., Detroit; Holcomb, J. W., Grand Rapids.

Iler, Harris D., Clinton.

Jewell, F. C., Detroit; Johnson, Ralph A., Detroit; Johnstone, K. T., Grant.

Kallet, Herbert I., Detroit; Kaump, Dowald H., Detroit; Kehoe, Henry J., Detroit; Kenyon, Fanny Helen, Detroit; Keshishian, S. K., Detroit; Kessler, Saba, Bay City; Keyport, Claude Roy, Grayling; Kitchen, D. K., Grosse Pointe Park; Kowalski, V. L., Detroit; Kullman, Harold J., Detroit.

Lam, Conrad R., Detroit; Lash, M. W., Detroit; Levin, Samuel J., Detroit; Lipkin, Ezra, Detroit; Lohr, Oliver W., Saginaw.

Marcus, Daniel B., Detroit; Martin, R. M., Detroit; McColl, Clarke M., Detroit; McGregor, Robert, Saginaw; McMillin, J. H., Monroe; Meader, Fred M., Detroit; Mills, Georgia V., Detroit; Morrow, R. J., Lansing; Murray, William A., Detroit.

Naylor, Arthur H., Detroit; Noth, Paul H., Detroit.

Oden, Constantine, Muskegon; Olson, James A., Flint.

Parsons, John P., Grosse Pointe Park; Patmos, Martin, Kalamazoo; Panzner, Edward J., Detroit; Peet, Max M., Ann Arbor; Penberthy, Grover C., Detroit; Perkins, Ralph H., Detroit; Ratigan, Carl S., Dearborn; Reeder, Frank Elmer, Flint; Reid, Wesley G., Detroit; Rennell, Leo P., Detroit; Robinson, H. C., Grand Rapids; Roth, Paul, Battle Creek; Russell, Ramon de Alvarez-Skinner, Ann Arbor;

Schroeder, C. F., Detroit; Selby, C. D., Detroit: Shafer, Harold C., Bay City: Sharp, A. D., Albion; Sherman, R. Newton, Bay City; Shotwell, Carlos W., Detroit; Shurly, Burt R., Detroit; Sichler, Harper G., Lansing; Smith, Lillian R., Lansing; Stein, Albert F., Fort Custer; Stevens, Rollin Howard, Detroit; Straith, Claire L., Detroit; Swenson, H. C., Grand Rapids.

Tulloch, John, Detroit.

Urmston, Paul R., Bay City.

Vonder Heide, Elmore, Detroit.

Walker, Roger V., Detroit; Walls, Arch, Detroit; Weller, Charles N., Detroit; Williams, Mildred C., Detroit; Williams, Robert J., Monroe.

*(Continued on Page 500)*

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## MICHIGAN PHYSICIANS AT CLEVELAND MEETING

*(Continued from Page 498)*

*Tuesday:* Balyeat, Gordon W., Grand Rapids; Beaton, Colin, Detroit; Badgley, Carl E., Ann Arbor; Bernstein, Albert E., Detroit; Black, P. S., Detroit; Braley, Alson E., Detroit; Brasie, Donald R., Flint; Bromme, William, Detroit; Brooks, Clark D., Detroit; Brown, George Maxwell, Bay City.

Campbell, Lloyd A., Saginaw; Carey, Benjamin W., Detroit; Carmichael, E. K., Detroit; Carstensen, Vincent H., Detroit; Chall, Henry G., Detroit; Cohn, Daniel E., Detroit; Conn, Raymond W. Detroit; Cope, Henry Erwin, Lansing; Curry, George J., Flint.

Doub, Howard P., Detroit; Dowd, Bernard J., Kalamazoo; Ducey, Edward F., Detroit; Duffie, Don, Central Lake; Dykhuizen, Harold D., Muskegon.

Eaton, Robert M., Grand Rapids; Elliott, H. B., Flint.

Farris, Jack Matthews, Ann Arbor; Fitts, Ralph L., Grand Rapids; Foster, Daniel P., Detroit; Freyberg, Richard H., Ann Arbor.

Graham, Ottis L., Fort Custer; Gregg, Sherman, Kalamazoo; Gurdjian, E. S., Detroit.

Harm, Winfred, Detroit; Hartgraves, Hallie, Detroit; Harvie, L. C., Saginaw; Hasty, Earl A., Whittemore; Hauser, I., Jerome, Detroit; Heath, Parker, Detroit; Heavner, Lyle E., Detroit; Hildreth, R. C., Kalamazoo; Horwitz, John B., Detroit; Hubbell, R. J., Kalamazoo; Huntington, Harry G., Howell.

Jaffar, Donald J., Detroit; Jamieson, R. C. Detroit; Johnson Richard M., Dearborn.

Kalmbach, Roland E., Lansing; Kane, David M., Sturgis; Kasper, Joseph A., Detroit; Kelsey, Lee E., Lakeview.

Lang, L. W., Detroit; Lange, Eugene W., Muskegon; Laverty, L. F., Bay City; Lemmon, Charles E., Detroit; Lepard, Cecil W., Detroit.

Markey, Joseph P., Saginaw; Maibauer, Fred P., Wyandotte; McDowell, D. B., West Branch; McElmurry, N. K., Perry; McGarry, B. G., Fenton; McGraw, Arthur B., Detroit; McKean, G. Thomas, Detroit. Miller, Ernest B., Manistee; Miller, Norman F., Ann Arbor; Mooney, C. A. Ferndale; Myers, Gordon B., Detroit.

Noer, R. J., Detroit.

Payne, C. Allen, Grand Rapids.

Ridlon, Joseph R., Detroit; Ripka, Emily L., Lansing.

Roy, Raymond S., Detroit.

Sagi, Joseph H., Detroit; Selling, Lowell S., Detroit; Selmon, Bertha L., Battle Creek; Sevensma, E. S., Grand Rapids; Shaffer, Loren W., Detroit; Sherman, Bessie Boudana, Detroit; Sladek, E. F., Traverse City; Sladen, Frank J., Detroit; Smyth, Charley J., Ann Arbor; Smith, Ferris, Grand Rapids; Spoehr, Eugene L., Ferndale; Steinman, Floyd H., Flint; Szejda, J. C., Detroit.

Top, Franklin H., Detroit; Towsley, Harry A., Ann Arbor; Turkel, Henry, Detroit.

Waddington, Joseph E., Detroit; Watson, B. A., Battle Creek; Watters, F. L., Detroit; Weinburgh, Harry Bennett, Lansing; Wershow, Max, Detroit; Wetzel, John O., Lansing; Wiersma, Silas C., Allendale; Wilson, James L., Detroit.

Yntema, Stuart, Saginaw; Zimmerman, I. J., Detroit.

*Wednesday:* Ames, Chester, Detroit; Anthony, George, Flint; Atchison, R. M., Northville; Baker, Abel J., Grand Rapids: Bethell, Frank H., Ann Arbor; Bettison, William L., Grand Rapids; Bittrich, Norgert M., Detroit; Block, N. Berneta, Lansing; Boccia, James J., Detroit; Branch, Hira E., Flint; Budson, Daniel, Detroit; Bunting, John W., Alpena; Burr, Geo. C., Detroit; Burton, D. T., Detroit; Chambers, Myrton J., Flint; Chandler, Donald, Grand Rapids; Christie, J. W., Pontiac; Coller, Frederick A., Ann Arbor; Connors, John J., Detroit; Corbett, John J., Detroit; Corneliuson, Goldie B., Lansing; Cortopassi, Andre J., Saginaw; Corliss, Grant R., Battle Creek.

D'Alcorn, Ernest, Muskegon; De Jong, Russell N., Ann Arbor; De Mol, Richard, Grand Rapids; Denison, Louis L., Detroit; De Vel, Leon, Grand Rapids; Donaldson, Sam W., Ann Arbor; Doty, Chester A., Detroit; Drolett, Lawrence A., Lansing; Durham, Robert H., Detroit.

Fast, Ralph B., Kalamazoo; Fauman, D. H., Detroit; Fenton, Meryl M., Detroit; Fitzgerald, Thomas D., Ann Arbor; Foshee, J. C., Grand Rapids; Fraser, Robert Howard, Battle Creek.

Gaikema, Everett, Grand Rapids; Gariepy, Louis J., Detroit; Gay, Harold H., Midland; Gordon, Dan M., Detroit; Gordon, William George, Ann Arbor; Grain, Gerald Orton, Detroit; Grant, Lee O., Grand Rapids.

Halsted, Lee H., Farmington; Heenan, T. H., Detroit; Herkimer, Dan R., Lincoln Park; Hershey, Noel J., Niles; Holmes, Roy Herbert, Muskegon; Holes, J. J., Battle Creek; Holst, John B., Jackson; Horton, Reece H., Detroit; Hudnutt, O. D., Plainwell; Hume, T. W. K., Auburn Heights.

Insley, Stanley W., Detroit.

Jackson, Howard C., Ann Arbor; Jaenichen, Robert, Saginaw; Jennings, Alpheus F., Detroit; Johnson, Lester J., Ann Arbor; Jones, Horace C., Detroit; Joyce, Stanley J., Detroit.

Kemler, Walter J., Ecorse; Kemp, Felix J., Pontiac; Kenning, J. C., Detroit; Kilmer, Paul B., Reed City; Kolvoord, T., Battle Creek.

Lamberson, Frank A., Detroit; Larson, Bertil T., Pontiac; Laurin, V. S., Muskegon; Lee, Harry E., Detroit; Leithauser, D. J., Detroit; Lepley, Fred O., Detroit; Lieffers, Harry, Grand Rapids; Litzenburger, A. F., Boyne City; Lynch, Vincent A., Detroit; Lyons, Richard H., Eloise.

MacInnis, D. P., Pontiac; Mackersie, W. G., Detroit; Marshall, Don, Kalamazoo; Martin, E. G., Detroit; May, Frederick T., Detroit; Mayer, Willard D., Detroit; McClure, Roy D., Detroit; McGillicuddy, Oliver B., Lansing; McKinney, Alexander R., Saginaw; McNeill, Howard H., Pontiac; Meengs, J. E., Grand Rapids; Melges, F. S., Battle Creek; Miller, Hazen L., Detroit; Miller, J. Duane, Grand Rapids; Miller, M. P., Trenton; Miller, Thomas H., Detroit; Mercer, Frank A., Pontiac; Meyers, Solomon George, Detroit; Munro, Frederick William, Grosse Pointe.

Noer, R. J., Detroit; Norton, Richard C., Battle Creek.

O'Donnell, Dayton, Detroit; Ohmart, Galen B., Detroit; Ormond, John K., Detroit.

Pfeiffer, Carl Curt, Detroit; Peelen, Matthew, Kalamazoo; Phillips, James W., Grand Rapids; Prendergast, John L., Detroit; Pickard, O. W., Detroit; Pino, Ralph H., Detroit; Poos, Edgar E., Detroit; Pratt, Jean Paul, Detroit; Price, Alvin E., Detroit; Price, A. Hazen, Detroit.

Reinsh, Ernest R., Detroit; Rice, Franklyn G., Cassapolis; Rice, Meshel, Detroit; Robb, Herbert F., Belleville; Robins, Hugh B., Marshall; Rodgers, William L., Grand Rapids; Rogin, James R., Detroit; Rom, Jack, Detroit; Rozan, J. S., Lansing; Ryerson, Frank L., Detroit.

Saltonstall, Gilbert B., Charlevoix; Sanford, Hawley, Detroit; Sawyer, Harold F., Detroit; Schooley, J. P., Detroit; Schroeder, Chas. Morrison, Ft. Custer; Shafter, Royce R., Detroit; Sheldon, John M., Ann Arbor; Shifrin, Peter G., Detroit; Simpson, C. E., Detroit; Sippola, Geo. W., Detroit; Smith, Henry L., Detroit; Smith, W. Joe, Cadillac; Snapp, Carl F., Grand Rapids; Snyder, C. H., Grand Rapids; Somers, Donald C., Detroit; Stapleton, Jr., William, Detroit; Stein, Lt. A. F., Ft. Custer; Steinhardt, Milton J., Highland Park; Steffensen, Wallace H., Grand Rapids; Stockwell, Benjamin W., Detroit; Stryker, Homer, Kalamazoo; Schwartz, Oscar D., Detroit; Szappanyos, Bela T., Detroit; Taylor, Nelson, Grosse Pointe; Teifer, Chas. A., Muskegon; Ten Have, Ralph, Grand Haven; Thompson, Alfred A., Mt. Clemens; Thompson, Oliver E., Battle Creek.

Wellman, Carl G., Detroit; Weyher, Russell Frank, Detroit; Whittaker, A. H., Detroit; Williams, C. J., Detroit; Willoughby, Frances, Travers City; Wilson, James, Detroit; Winfield, James M., Detroit; Wittenberg, Samson S., Detroit; Wolfson, Victor Hugo, Mt. Clemens; Zielinski, Chas. J., Detroit.

*Thursday:* Adams, James R., Dearborn; Ashley, L. Byron, Detroit.

Babcock, Myra, Detroit; Ballard, Charles S., Detroit; Beattie, W. A., Ferndale; Butler, Volney N., Detroit.

Carlson, Harold W., Detroit; Clapp, Henry W., Grand Rapids; Clark, Emilie Eleanor Arnold, Detroit; Cooksey, W. B., Detroit; Cooper, Edmund L., Detroit.

Dillard, M. P., Detroit; Dowdle, Edward, Detroit.

Fennig, Foster A., Marquette; Flaherty, Norman W., River Rouge; Flaherty, Samuel A., Detroit.

Hansen, Frederick G., Detroit; Hartman, Frank W., Detroit; Henderson, Harold, Detroit; Honhart, Fred L., Detroit; Howard, Philip J., Detroit; Howlett, Robert R., Caro; Humphrey, Arthur A., Battle Creek.

Johnston, Chas G., Detroit.

Kahn, Edgar A., Ann Arbor; Keim, Harther L., Detroit; Fraser, Robert C., Port Huron.

Kinde, M. R., Battle Creek; Kleinman, Shmarya, Detroit; Kloeppel, Chester S., Detroit; Krieg, Earl G. M., Detroit.

Legalley, Kenneth D., Port Huron; Litzenburger, A. F., Boyne City; Long, Edgar C., Monroe.

Mason, P. W., Detroit; Meads, J. B., Jackson; Meade, William Harold, East Lansing; Meinecke, Helmuth A., Detroit; Metzger, Harry C., Detroit; Meyers, Maurice P., Detroit; Moisides, V. P., Detroit; Murphy, Frank J., Detroit.

Olney, H. E., Detroit.

Pollock, Donald A., Yale;

Reisig, Albert H., Monroe; Richards, C. J., Durand; Robb, J. M., Detroit; Robbins, Edward R., Detroit.

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# ✶ . HALF A CENTURY AGO ✶

## DIPHTHERIA . . . WHAT SHALL WE DO WITH IT?*

W. C. HUNTINGTON, M.D.
Howell

Diphtheria is now understood to be, primarily, a local affection caused by the action of certain microbes upon a susceptible surface; and, secondarily, a systemic infection, caused by the absorption of the poisonous products of the primary disease.

The condition necessary for the production of the disease is the presence of the diphtheritic microbes, in quantity and activity sufficient to overcome the individual's powers of resistance. This may result from a powerful colony of microbes acting upon a resistant surface, or a relatively weak colony acting upon a susceptible surface; but, once the disease becomes established, the patient with greatest susceptibility suffers most, providing, the attending circumstances are the same. Either condition above mentioned would produce a relatively long period of incubation, with, perhaps, a prodomal period; for it seems probable that microbes may exist in the fauces in such quantity that their products will cause constitutional symptoms before actual inflammation occurs; on the other hand, an extraordinary exposure, such as by inoculation or the sucking of a tracheotomy tube, leads to an almost immedaite attack.

The age of greatest susceptibility is between two and ten years, with little, if any, relative advantage in favor of either sex. Susceptibility diminishes from the latter period to adult life, with the greater immunity among males after puberty.

Children with light yellow hair, and complexion of nearly the same hue, seem most susceptible, while negroes seem to enjoy some immunity against the disease.

Diphtheria is influenced, in a remarkable degree, both in its propagation and its effect upon the system, by atmospheric conditions; and this fact should be a prominent element in prognosis and in estimating the value of treatment. The atmospheric conditions in which diphtheria shows its greatest virulence, are a temperature just above the freezing point, with a rarefied air loaded with moisture. If, while a diphtheritic patient is in a critical condition, such weather occurs, the rarefied air, still further attenuated by moisture, causes increased respiratory effort, thus increasing the exhaustion, and deficient oxygenation of blood, with defective elimination. The devitalized tissues and moisture feed the microbes to increased action. The stimulating quality of the blood is impaired, and the reduced atmospheric pressure invites it into the peripheral circulation, and the supply at the nerve centers is diminished. Instead of sunshine, gloom has settled upon the earth, and as the patient looks to friends for relief, he reads anxiety and grief on every countenance. Hope has gone, cheer has fled, and the patient dies.

The controversy as to whether diphtheria always results, either directly or indirectly from a previous case, or whether it may originate *de novo,* under any general or special unsanitary conditions, seems settled in favor of the former; but unsanitary conditions have great influence upon the propagation and virulence of the disease.

The tendency of opinion in the profession, at the present time, seems to be to underrate the agency of the air in conveying diphtheria. I believe that this is because the rural districts are too seldom heard from. Dr. J. Lewis Smith says: "The area of contagiousness of diphtheria is small, extending only a few feet." Does the air destroy the diphtheritic germs within a few feet of the patient? If so, why does it not do so in infected premises and clothing, where it remains active for months, or perhaps, years? Or, does the air, simply by dilution, dessication and reduction of temperature, so reduce the number and activity of the germs that would be received by one individual, that they do not overcome the resistance of persons of ordinary susceptibility? Do not these germs, carried by air currents to distances without limit, take root in congenial soil, propagate and produce sporadic cases?

Three severe epidemics of diphtheria have occurred in Howell within the limit of my professional experience. The first one seemed composed entirely of sporadic cases. They were about equally divided between village and country, with no apparent possible connection between them, or any common source of contagion, save the common air and contagion within the family. The cases invariably occurred amid unsanitary conditions; the weather was of the kind that I have heretofore described, and a large proportion of the patients died. With the occurrence of continued freezing weather, the epidemic subsided.

Several years afterward, one year ago last winter, we had practically a repetition of our former experience, excepting that the cases were confined to the village. There were, perhaps, evidences of contagion in some cases. The weather was nearly the same as before, much of the time.

The third epidemic occurred last winter. The first case occurred in the fall, amid unsanitary conditions, in a rather isolated portion of the village, where it had prevailed the most extensively the year before, and probably resulted from the previous epidemic. The second case, living near the first one, was a very mild one of nasal diphtheria. The child was not confined to the house and played freely with other children until neighbors took alarm and was called. I found a small amount of deposit upon the tonsils, but the anterior nares were lined with pseudo-membrane. Many, if not all the cases last winter were probably, either directly or indirectly contagious, and occurred without regard to other circumstances or conditions.

The lesson to be drawn from this seems to be that contaminated air should not be allowed to escape from the sick room. Diphtheria usually occurs when a fire can be kept in the room. The effort should be to create as great a draught as possible and modify the heat by admitting outside air. This, if possible, should be received from the same direction as the outside currents, and the result will be to create currents which will prevent the subsidence of germs and convey them,

*(Continued on Page 529)*

*Presented at the 26th annual meeting of the Michigan State Medical Society at Saginaw in 1891.

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# Pre-Operative Preparation of the Patient

By Ambrose L. Lockwood, D.S.O., M.C., M.D., C.M., F.A.C.S., F.R.C.S.(C)
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■ Specific and thorough pre-operative preparation for operation is almost as important in avoiding operative and postoperative complications and in reducing mortality, as is accurate diagnosis and painstaking and methodical surgical technic in skilled hands applied to well-tried and established surgical procedure. To put it another way, grave complications and even death may occur after the very finest executed surgical procedure because all necessary pre-operative measures had not been carried our prior to operation.

**Such being the case it becomes equally imperative that in establishing the diagnosis, the operative risk and the possible operative and postoperative complications be likewise determined, the safest time for operation and the pre-operative measures that must be carried out before surgery is to be undertaken. There must be nothing haphazard in estimating the risk. Having in mind the risk, the necessary pre-operative measures must be decided upon and carried out accurately, methodically and most thoroughly. Not only must the risk and pre-operative measures to be carried out be estimated for the particular operation, but also for the alternative procedure that may be necessary should the one planned not be possible for one reason or another.**

The pre-operative measures to be carried out vary with the nature of the disease, the complications, the general condition of the patient, the gravity and magnitude of the operation to be carried out and the results to be expected.

Brain surgery has become so highly specialized that the pre-operative measures to be instituted will not be discussed in this presentation.

### Thyroid Surgery Preparation

Thyroid surgery is now so widely practised that the necessary pre-operative preparation should be the common knowledge of the profession as a whole. The pre-operative treatment varies with the type of hyperthyroidism, and the degree of toxicity.

In 1924, that great physician Henry Plummer advocated the use of Lugol's Solution in patients with exophthalmic goitre. The results were amazing, and since then Lugol's solution has been administered to such patients in preparation for operation. Volumes have been written on this subject, suffice it to point out that when hyperthyroidism of the exophthalmic type has been diagnosed, Lugol's solution should be administered if the patient is planning to be operated upon within the next two or three weeks. The dose

varies with the toxicity of the patients. Generally speaking we plan to give sufficient to have the maximum effect about the fourteenth day when surgery should be undertaken.

**Patients are started on a dosage of 4 to 8 minims four times a day—increased 2 minims per dose each day or second day till they are getting 48 to 80 minims per day. This varies, of course, with the clinical improvement and the tolerance of the patient to such a dosage, and whether or not Lugol's solution has recently been administered. In fact, if patients have had prolonged treatment with Lugol's solution, which is unwise, we usually stop the drug entirely. One can predict a striking improvement in patients having Lugol's solution for the first time, but prolonged iodization clouds the picture, and surgery in such a patient may be followed by an alarming reaction.**

Frequently it is safer to defer operation in such patients four to eight weeks to allow the thyroid to throw off the excess of iodine and to again become sensitive to iodine. Lugol's solution should be employed as our most valuable measure in preparation for operation, but not for the cure of the disease.

There is some difference of opinion as to the value of iodine in toxic adenomatous goiters. We employ it in small doses in such patients who are extremely toxic, and believe benefit occurs in those who have a mixed type of gland —that is—a hyperplasia as well as degenerating adenomata, and that the benefit is due to subinvolution that occurs in the hyperplastic tissue. Patients with a diffuse adenomatosis or with discrete degenerating adenomata may react badly to iodization, and instead of improvement, harm may be done. However, in patients, gravely ill with a toxic adenomatous goiter, Lugol's solution should be tried, but the effects must be closely observed. If they have had prolonged iodization, surgery must be deferred or an unexpected postoperative hyperthyroid storm may occur and a fatality result. Prolonged iodization has, undoubtedly, contributed to unexpected postoperative fatalities in patients with toxic adenomatous goiters.

Generally speaking, however, if employed over a period of ten to fourteen days the administration of Lugol's solution is our most valuable ally in the cure of hyperthyroidism.

**Rest in bed, a high carbohydrate diet, sedatives and forced fluids are of great value.**

Digitalis is rarely indicated or necessary. Occasionally, if the heart is badly decompensated, it may be wise to try the effect of digitalis, but it was Plummer's dictum that digitalis should not be depended upon to improve the heart sufficiently to warrant thyroidectomy.

Blood transfusions may be necessary in the late stages of hyperthyroidism characterized by great weight loss, diarrhea, vomiting and delirium, and may turn the tide before Lugol's solution could become effective. In such patients sodium iodide intravenously is of great value, and should be used to hasten the involution process in the hyperplastic cellular tissue.

Intravenous glucose may also be of value in such patients if they are greatly dehydrated.

Thyroid extract (desiccated) should be administered to patients with so-called chronic hyperthyroidism characterized by low basal metabolic readings.

In addition, it is a wise precaution to administer thyroid extract for six or eight days to patients past middle age with large adenomatous goiters which are to be removed for relief of pressure or because of the fear of malignancy, particularly if repeated basal metabolic rates are consistently low. The vital processes of such patients are thus stepped up, unexpected postoperative reactions are avoided, and convalescence is more rapid.

In the preparation of extremely toxic patients for operation the blood iodine level is important, and we must keep it in mind that damage to the glycogenic and proteogenic functions of the liver is the greatest factor to be combatted if fatalities are to be avoided. That means in addition to iodine to reduce thyroid activity, large quantities of fluids, particularly glucose, are necessary.

In addition to the pre-operative measures necessary before operative measures are undertaken, we must determine the advisability of multiple stage procedures in gravely ill patients who do not respond rapidly and completely to the pre-operative measures employed.

### Gastric and Duodenal Surgery

The pre-operative measures necessary before undertaking such surgery consists in overcoming dehydration, gastric lavage if there is retention, perhaps combined with the use of dilute hydrochloric acid if the stomach acids are low and the stomach content is foul. Blood transfusion is necessary to combat profound anemia, and especially if the general resistance of the patient is low, and a major procedure such as gastric resection or even gastrectomy may be necessary. Large amounts of glucose intravenously and calcium chloride intravenously should be given if there has been prolonged vomiting and the blood chloride is low.

Vitamin therapy is valuable.

### Obstructive Jaundice

The hemorrhagic tendency of jaundiced patients need not, I am sure, be stressed before this meeting.

**The fact, however, that post-operative fatalities due to hemorrhage are still being reported makes further study necessary as to the cause of hemorrhage, and the additional measures necessary to avoid such a tragic sequel to successful operative procedures that in spite of many technical difficulties are now well established and sould apart from hemorrhage carry little, if any, mortality in experienced hands.**

While it is difficult to demonstrate a close relationship between the tendency to bleed and the duration of obstructive jaundice, clinically, bleeding is more common as the period of obstruction increases. It is more common in obstructive jaundice due to malignancy probably because of hepatic damage. Bleeding is more common in deeply jaundiced patients yet the depth of bilirubinemia is not always a controlling factor in the bleeding. The liver damage increases in prolonged jaundice, but on the other hand bleeding credited to hepatic disease may occur in the absence of jaundice as in patients with biliary fistula and carcinoma of the liver. All evidence at hand suggests the extent of damage to the hepatic parenchyma is the most important factor resulting in hemorrhage in hepatic disease. The fact that there is no tendency to bleed in patients with hemolytic jaundice and that spontaneous hemorrhage in patients with catarrhal jaundice is rare lends support to the theory that liver damage accounts for bleeding.

Hepatic insufficiency and renal insufficiency are associated surgical complications of jaundiced patients. In addition, damaged liver utilizes carbohydrates more freely than other nutrient material, and thus large quantities of 10 per cent glucose is of great value intravenously preoperatively. Likewise a high carbohydrate diet is indicated as well as forced fluids by mouth. The increase in administration of fluids, orally and intravenously, improves elimination through the damaged kidney as well as supporting the glycogenic function of the liver. Hepatic insufficiently and hemorrhage are the main causes of death after operative procedures in jaundiced patients.

The level for serum bilirubin gives the best indication of the degree of parenchymal injury. The fact that many deeply jaundiced patients remain in quite good condition must not be allowed to give us a false sense of security because in earlier years it was not uncommon after operation for relief of obstruction in such patients to have a grave toxemia develop that quickly caused an unexpected fatality. This unfortunate result is not easy to explain, but may be due a flood of toxic substances released from the damaged liver and dilated biliary passages, into the systemic circulation, causing "cholemia or hepatic insufficiency" as suggested by Counsellor and Mc Indoe and led Crile to recommend gradual decompression of the biliary system in such patients.

It has for centuries been realized that the liver has a most vital role in maintaining a sense of well being and there is evidence to suggest that damaged hepatic tissue in jaundiced patients does not maintain its important role in the production of necessary constituents of the blood and many investigators such as Rich, MacCallum, Roenik, Campbell, Rosin and Snell have demonstrated that the oxygen carrying power of the blood is not maintained in patients with obstructive jaundice. Anoxemia of the anoxic type does occur in parenchymal hepatic disease, and is an additional reason for employing blood transfusion prior to operation. Transfusion not only increases the hemoglobin and thus the oxygen carrying power of the blood, but also directly

improves the percentage of oxygenation of arterial blood.

Anoxemia associated with prolonged obstructive jaundice should be recognized and looked on as a bad sign. The anoxic anoxia can be relieved by oxygen inhalation, and the anemic anoxia by blood transfusion.

Finally in the preparation of the jaundiced patient for operation in addition to a high carbohydrate diet, forced fluids, glucose 10 per cent intravenously daily, viosterol minims 50 t.i.d. appears to reduce the bleeding time, vitamin K and five 10 gr. tablets of ox or pig bile t.i.d. by mouth is of great value, but blood transfusion is the most important adjunct, and oxygenation in those with anoxemia of the anoxic type. Oxalic acid intravenously may prove of great value in controlling hemorrhage during and after operation.

The present low mortality in patients operated upon for relief of obstructed jaundice is due largely to adequate pre-operative preparation, and is in direct ratio to the thoroughness with which it is carried out.

**It may not be out of place to point out that blood transfusion must not be withheld till the patient is on the operating table or to be given only postoperatively. It requires some days for the maximum benefit of transfusion to become evident in obstructive jaundice. However, it must also be kept in mind that the benefit of transfusion is not lasting in jaundiced patients, so that great care must be taken to operate at the most opportune moment, and if in doubt additional blood should be given pre-operatively, and postoperatively as well, in questionable cases.**

It must be emphasized that even if the prothrombin clotting time is within normal limits, the quantitative level of prothrombin in the blood may be as low as 40 to 50 per cent of normal, and that a normal prothrombin clotting time preoperatively is not a certain guarantee against postoperative hemorrhage. The work of Dann, and of Schmidt and Greaves indicates that the hemorrhagic tendency is associated with a reduction in the prothrombin due to defective absorption of vitamin K resulting from the absence of bile in the intestine.

The Ivy bleeding time test is a fairly accurate indicator of the duration and cause of jaundice and for determining the tendency to bleed. The ordinary bleeding time or coagulation time estimated from blood withdrawn by puncture of the finger is not sufficiently accurate to employ as an indication of the hemorrhagic tendency in obstructive jaundice.

### Surgery of the Large Bowel

Adequate pre-operative treatment has greatly contributed to reduction in mortality in colon surgery. Restoring the fluid balance and increasing the carbohydrate intake is important. Vitamin deficiency must be corrected and blood transfusions employed when the hemoglobin is below 70 per cent. Enemas and colonic irrigation should be given to clear out the bowel in those partially obstructed, and of course patients totally obstructed must be relieved by cecostomy before resection is undertaken. Usually four to eight days are required to prepare patients for resection, but in the two-stage procedure less time may be necessary because the preparation of the patient will continue during the interval of ten to fifteen days before undertaking resection. Serums and vaccines that have been employed to offset peritonitis are of value.

### Genito-Urinary Surgery

Pre-operative treatment in such surgery depends upon the general condition of the patient, as in all cases, but the kidney function must be determined and every effort made to improve it prior to surgery—Ringer's solution, glucose 10 per cent, blood transfusion, viosterol, perhaps bladder lavage, and forced fluids by mouth may all be required, and possibly decompression of the bladder. Perhaps in no field of surgery have we at hand such accurate laboratory and clinical data to aid us in carrying out pre-operative treatment. The pleasing reduction of mortality in genito-urinary surgery has largely been due to adequate and thorough pre-operative preparation before surgery is undertaken.

### Obesity

Postoperative mortality is very definitely increased in certain operations such as gall-bladder surgery, and particularly after operation for large ventral and postoperative herniæ, by obesity. Unless operation is urgently necessary, it should be deferred in obese patients, and they should

be put on a rigid anti-obesity diet and reduced in weight before surgery is undertaken. This is particularly important in dealing with large ventral and postoperative herniæ.

### Pulmonary Embolus and Thrombosis

Herniotomy for the cure of inguinal hernia is too often looked on by beginners in surgery as a simple operation to be undertaken by any novice. It would be well if the mortality after herniotomy was more widely recognized. Death from pulmonary embolus is probably more common after inguinal herniotomy than after any other operative procedure. From our experience in the use of leeches for the relief of phlebitis, I believe it is a wise precaution to apply leeches the day of the operation, the third or fourth postoperative day and at the first sign of an elevation of temperature on the seventh or eighth day or even later if there is the least suggestion of a phlebitis developing. I have found leeches of such value in avoiding and quickly relieving phlebitis when it has developed that I wish to acknowledge my thanks to Alton Ochsner for the valuable suggestion. He is most worthily carrying on the surgical tradition of his renowned and venerated uncle, the late Albert Ochsner, to whom I have long been indebted for so many valuable surgical suggestions. Heparin is of great value in avoiding the development of thrombosis and embolus, and should be more frequently employed intravenously prior to operation in such operations. Papaverine hydrochloride ½ gr., a vasodilator given intravenously produces improvement in the circulation within a few minutes, and may be valuable just prior to operation and during operation, as well as postoperatively, in aged and debilitated patients.

The use of digitalis pre-operatively for patients with decompensated hearts requiring a surgical procedure is valuable, but must not be relied on too much in avoiding a grave postoperative reaction.

Patients who probably will require oxygenation postoperatively as in many chest operations should be accustomed to the oxygen mask or tent prior to operation. In addition, superoxygenation of the blood prior to such operations is valuable during operation.

Every effort must be made to clear up bronchitis, troublesome coughs, and nasal and throat irritation prior to operation, if postoperative bronchopneumonia and massive collapse is to be avoided.

### Blood Transfusion

Blood transfusion is such a vital life-saving measure and so frequently resorted to, daily, throughout the surgical world that any discourse on pre-operative measures must include careful consideration of many problems having to do with the use of blood transfusion. Time will not permit me to deal at length with the problem in this address, but I want particularly to point out that a close study of the reported mortality directly due to blood transfusion is most alarming, and indicates that it is a major surgical procedure not to be lightly recommended, and not to be carelessly employed.

**Hemolytic shock caused during transfusion must constantly be kept in mind. Gesse (Leningrad) from replies to 1,700 questionnaires reported a mortality of 52.5 per cent in 200 cases reported. Sighing respiration is perhaps the earliest warning, followed by a sudden change in the general state, excitement, anxiety, nausea, vertigo, cephalic and lumbar pain, and a fall in blood pressure. Spasm of the renal arteries from the poisonous products of degeneration probably occurs, accounting for lumbar pain. Glucose must at once be given intravenously to induce diuresis. Nephrosis is the most common finding at autopsy of such patients.**

Incompatibility between the blood of the donor and recipient is by far the most common cause of this grave sequela. Hemolysis due to blood being stored too long is a factor, as is hemolysis in recipients who have been febrile for long, prior to transfusion, and in patients who have had a profound anemia over a long period.

It is not sufficient to group the donors blood, but such blood must be carefully cross grouped with that of the recipient by the hanging-drop method before being employed.

Using the blood of the same donor a second time too soon after the first transfusion may cause a fatality.

A break in technic in collecting and administering the blood accounts for a definite percentage of reactions and death, and must be carried out with the utmost care to avoid infection.

Too low a hemoglobin content of the recipient's blood may make transfusion dangerous, and unless transfusion is urgently necessary to save life, every other means must be taken to improve the general condition of the patient, and particularly the hemoglobin before giving blood. Otherwise, apart from a grave reaction, bronchopneumonia or a septic complication may ensue and cause an unnecessary fatality.

Giving blood too rapidly may cause death.

Unaltered blood or citrated blood may equally be associated with reactions. The experience of the Russians in the use of cadaver blood indicates that such blood is probably safer. Placental blood carefully collected seems as safe as blood collected from the vein of a donor.

Properly stored blood, if not held too long a period, is apparently satisfactory.

Multiple small transfusions given slowly, and with the most careful surgical care, is safer in debilitated patients with long standing anemia.

Massive transfusions as employed by Lundy, who has contributed so much to improvements in methods of blood transfusion, are at times necessary, and are life-saving. The drip-method as employed so successfully at Middlesex Hospital, London, is extremely valuable. Administration of Heparin, as developed so expertly by Murray given intravenously to the donor just before withdrawing the blood may prove of great value in avoiding congestion of the blood and in allowing more time for giving transfusion.

Stored blood serum and powdered blood may prove of great practical value in offsetting shock and simplifying transfusion in times of great stress as under war conditions, but the percentage of reactions is still too high.

Plasma is an ideal substitute for whole blood. In traumatic or operative shock, burns or circulatory failure, when the red cell count is high, plasma is indicated instead of whole blood. The reaction following the use of plasma is much less than with whole blood and may be given intramuscularly if it is not possible to give it intravenously. Outdated bank blood is ideal as a source of plasma. It can be stored indefinitely and be easily transported.

Transfusion is contra-indicated in patients *in extremis* not due to shock or hemorrhage. On the other hand, transfusion is *specific* for acute hemorrhage and shock, and its use should not be delayed.

One author reports 35 per cent of reactions in 100 transfusions and 16.7 per cent of reactions in a large group of collected cases. *Six* of the 100 patients transfused *died* as a direct cause of transfusion.

Such reactions, while perhaps unduly high, and the fatalities directly caused by transfusion, must constantly be kept in mind. There must not be anything haphazard in selecting the donor, determining the necessity for transfusion, the condition of the recipient or the method of collecting and administering the blood.

Careful pre-operative preparation of patients, their reaction to it, the employment of multiple stage procedures and operation at the most opportune moment are probably the most important life-saving features of modern surgery, and require the closest coöperation and team-work of many men working in the closest daily association if the ultimate reduction in complications and mortality is to be attained. Surgery has been made safe for humanity. It still remains, however, to make humanity safe for surgery. This means largely earlier diagnosis, greater precision in pre-operative care, and the select operative procedure at the proper moment.

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## POLITICALLY CONTROLLED MEDICINE

" * * * The threat of politically controlled medicine can be forever destroyed with unified constructive action by the physicians of this country. If every member of a County Medical Society in this State would refuse to hire himself to the Government except as a part of and with the approval of his Medical Society it would obviously become impossible for State Medicine to develop. However, he must then be willing and anxious to meet the Government as a partner in providing care for the indigent and low income groups. The governmental agency fulfills its share of the partnership by providing the necessary funds, the physician his share by caring for these individuals at a fraction of the usual fee. To do this efficiently, all funds from Federal, State, County and City agencies should be pooled and devoted directly to the needy sick. * * *"—From Presidential Address, "Unity in Medicine," by W. Paul Holbrook, M.D., in *Southwestern Medicine*, April, 1941.

# Diagnosis of Coronary Occlusion*

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■ Organic heart disease is widely recognized as the chief cause of death. Although it is impossible to obtain accurate statistics,[24] the increase in death rate appears to be limited to middle life and old age. Little may be expected in the way of a reduction in incidence or mortality from heart disease in later life.[16] This will be due, in part, to the more widespread recognition of coronary involvement as an important factor in heart disease, to increased skill in its recognition, as well as to an actual increase in the number of cases resulting from a steadily rising proportion of older individuals in our population. The common impression that advanced coronary disease is fatal results in a feeling of despair. The situation is by no means hopeless.[11,50] Although the initial mortality is high, a large proportion survive attacks of coronary occlusion for many years.[15,48] Likewise, let us not neglect premature coronary disease. It is responsible for much unnecessary suffering and disability among persons still in the prime of life. Much has been accomplished in the control of cancer by governmental, professional and lay organizations. Similar organizations might be of benefit in educating the public regarding better health habits, mental hygiene, the value of moderate exercise and of sufficient rest. Promotion of periodic health examinations in middle life would aid materially in the detection of obesity, hypertension and diabetes, as well as incipient coronary disease. The affected individual might then derive the benefits of proper management and suitable environmental adjustment.

The prolonged delay in the recognition of the importance of coronary artery disease seems surprising. Heberden,[14] in 1768, did not suspect that such was the basis of angina pectoris, which has been described[33] as first occurring in 1622. Although coronary occlusion, correctly diagnosed during life on May 4, 1876, was first reported by Hammer[23,33] of St. Louis, it was the classic work of Herrick,[25] in 1912, that led to its recognition[26] as a distinct clinical entity. During the last decade few medical problems have been studied more intensively than disease of the coronary arteries.[16]

Arteriosclerosis has long been recognized as one of the major pathological states. Its causation is not understood. Empirical attempts to reproduce it experimentally have been futile. The chief cause of interference with the blood supply to the heart is progressive coronary obstruction resulting from changes essentially arteriosclerotic. Areas of softening (atheroma) appear in the arterial wall, followed by thickening and calcification.[31] The process encroaches on the vessel lumen. Myocardial ischemia, sufficiently marked to cause anginal pain, may occur from such narrowing alone. Greater interference with the coronary circulation results when thrombus formation about an intimal break, partially or wholly, occludes one of these narrowed vessels. In most instances acute coronary occlusion develops at the site of such an arteriosclerotic lesion.[53] The recent demonstration[52] of rich vascular networks within and around arterioscelerotic plaques was a significant finding. As a result of this increased vascularity of the vessel wall, it is suggested that the occurrence of hemorrhage or other exudation within the intima may lead to the formation of thrombus upon the intimal surface, with resultant occlusion of the vessel. It is also suggested that this increased vascularity of the vessel wall may lessen the untoward effects of occlusion by supplying the basis for a collateral circulation.[4,22,32,36,49]

It would appear that, clinically, occlusion in an otherwise intact coronary circulation would be most dangerous.[53] Sudden death is the striking feature of coronary embolism, twelve of fourteen patients having died suddenly.[44] In contrast, infarction seldom develops following the rare occlusion due to syphilis, since this is usually gradual in its development.[8]

Usually the diagnosis of a typical attack of coronary occlusion can be made with relative ease. At times it is extremely difficult or even

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impossible to arrive at a definite conclusion until all the facts have been carefully considered.

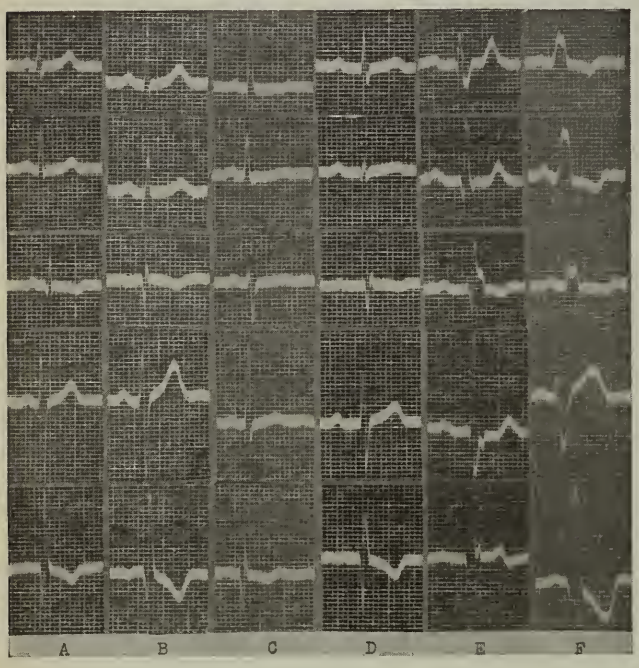


Fig. 1. (*a*) Normal electrocardiogram. Chest leads in this record, as in all others illustrated, were obtained by a simplified technic modified from Roth.[43] After the three standard leads were recorded the left arm electrode was removed and applied to the left chest in the fifth interspace at the midclavicular line; lead wire connections remaining undisturbed. The electrode was held in place by the left fingers of the patient, or an assistant, lightly applied to the over-lying folded rubber strap. Lead I and Lead III on the control board were selected in turn; a Lead IV (CR) and Lead V (inverted $CF_4$) being recorded in succession. (*b*) Large $Q_3$, more frequently found in coronary disease than in any other condition, is here illustrated, along with tendency to left axis deviation. (*c*) Flattening of S-T interval and T wave in all leads, as evidence of coronary sclerosis. (*d*) P-R interval of 0.24 second, large $Q_3$ and flattened $T_2$ are significant changes. (*e*) P-R interval of 0.24 second, large $Q_3$, QRS complex slurred, QRS interval 0.12 second, and S-T interval displacement are of significance. (*f*) Grossly slurred QRS complex, QRS interval of 0.12 and 0.13 second in duration, with T wave opposed to the chief deflection of QRS in each lead, suggests an early bundle branch block of indeterminate type. These changes, along with dropped beats, various bundle branch lesions, complete heart block, and auricular fibrillation, are common manifestations of coronary disease.

**A carefully elicited history will usually reveal significant manifestations which commonly occur during the latent period of coronary arteriosclerosis.[53] Undue fatigue, lack of endurance, nervous irritability, insomnia and gastro-intestinal disturbances, i.e., palpitation, belching, epigastric distress or a feeling of fulness and discomfort after meals. Grossly irregular, intermittent or slow pulse may be recalled. Shortness of breath on exertion, paroxysmal dyspnea or angina of effort may have occurred. These are evidence of early coronary disease; coronary occlusion with infarction occurs later, while heart failure finally develops as the end result of the arteriosclerosis. During this latent period electrocardiography serves as an invaluable check on the clinical examination (Fig 1). It often aids materially in establishing the diagnosis of coronary disease at a time when proper management may be of greatest benefit to the patient. It should be employed in every case presenting any of the above complaints. It should be used in any case in which, for any reason, coronary disease is suspected.**

The onset of a severe attack of coronary occlusion is characterized by pain, localized beneath the sternum, radiating to the left arm, subscapular area, jaw, throat or neck, to the upper abdomen, and at times to the right chest and arm. It may be constricting or vise-like, burning, boring, aching, choking, or simply a sense of substernal pressure or distention. It may occur during rest or sleep. Typically, it is continuous and prolonged. Unlike the pain of angina, it is little influenced by activity. Although usually severe the pain may be mild. A colored patient with a severe and fatal attack complained of rats in her chest which gnawed only at night.

Associated with the pain there is often a sense of prostration or of impending death. Nausea and vomiting may occur as initial symptoms, or as the result of morphine administered for the control of pain.

Dyspnea as the initial symptom or associated with pain is nearly always present. The sudden onset of dyspnea and/or pulmonary edema, in a middle-aged man, should lead one to suspect the occurrence of coronary occlusion. Recurrent chest colds or cough may be significant.

The early picture is frequently that of shock or peripheral circulatory failure. In some the picture of heart failure may be outstanding. In others, there is a combination of the two with one or the other predominant.[19] It is this variability in type of circulatory failure that is responsible for the protean manifestations of myocardial infarction.

The face is ashen in color. The features, strained and anxious, frequently suggest excruciating pain. The skin is often cold and clammy or even wet with perspiration. Cyanosis, the result of the pulmonary edema, so commonly present, may be marked from the start or develop later. Moist râles at the base of one or both lungs may be present.

The sudden fall in blood pressure, in part, due to peripheral circulatory failure, is likewise, in part, the result of infarction with resultant myocardial insufficiency and directly impaired cardiac output.[20] Experimentally, injury currents develop within one or two minutes following occlusion of even a small coronary branch.[56] Contraction, in the ischemic area, stops approximately within one minute.[46] Since the infarcted area is no longer able to contract and systolic stretching occurs, the heart is unable to function efficiently. The degree of impairment depends on the area and extent of infarction which in turn is determined by the site of obstruction. Since infarction rarely involves the right ventricle the clinical picture, aside from the evidence of shock, is almost exclusively that of left ventricular failure.

During an attack of coronary occlusion the blood pressure may be normal or slightly elevated. If recorded soon after an attack the fall in pressure may be missed unless repeated readings are taken at proper intervals. In the presence of an arterial hypertension, where the previous blood pressure level is unknown, a normal reading may mislead unless a further drop in pressure is noted. At times, the electrocardiogram may assist by indicating the pre-existing hypertension. Whenever coronary occlusion is suspected, frequently repeated blood pressure determinations is an important diagnostic method at the command of every physician.[20]

The sudden development of a weak pulse, associated with feeble heart tones, is significant. The younger the patient the more significant are these distant heart tones—the more likely are they to be due to cardiac weakness alone, rather than the result of the emphysema of older individuals. The pulse may be rapid, irregular, intermittent or slow, the result of tachycardia, fibrillation, extrasystoles, dropped beats or heart block. An inequality in the force of the various beats may be noted. Pulsus alternans, as such, is rarely present. Gallop rhythm is common and is of considerable diagnostic importance.[9] Diminished urinary output is probably due to the rapid fall in blood pressure, to sweating and to insufficient intake of fluids. A transitory or persistent glycosuria may occur. The sensorium is usually clear, except for the effects of necessary sedation. At times, however, mild delirium or semi-coma may occur, due to fall in blood pressure in a hypertensive patient, to pain,

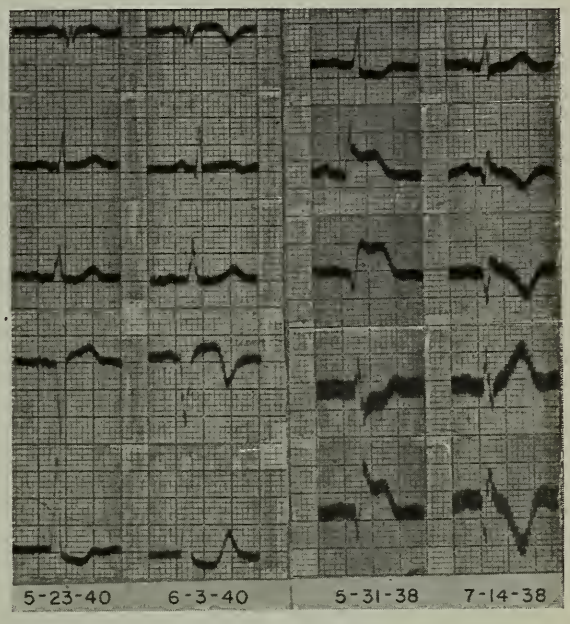


Fig. 2. 5/23/40. Male, aged forty-five, an early $Q_1T_1$ type of occlusion curve, twelve hours after acute infarction of the anterior apical portion of the left ventricle. Note that S-$T_1$ elevation and S-$T_3$ depression, although slight, are present. $T_1$ shows beginning inversion. The initial positive ventricular deflection is absent in chest leads with $T_{4,5}$ less positive in direction. 6/3/40. Eleven days later, S-$T_1$ still elevated, with definite inversion of $T_1$ and beginning inversion of $T_2$ and reversal of polarity of $T_{4,5}$. 5/31/38. Male, aged fifty-four, an early $Q_3T_3$ type of occlusion curve 8 hours after acute infarction of the posterior basal portion of the left ventricle. Note marked S-$T_1$ depression and S-$T_{2,3}$ elevation. If a record is obtained within a few hours after a coronary accident S-T interval displacement in chest leads is frequently present. This displacement quickly disappears, usually within a few hours, at times two to three days;[18] the chest leads thereafter being of normal contour. Note that the initial positive ventricular deflection persists. More commonly, in $Q_3T_3$ curves, normal chest leads are associated with both early and late limb lead changes; chest leads usually being unaffected by posterior basal infarctions. 7/14/38. Note large $Q_3$ and deeply inverted coronary T wave in Leads II and III, with return of chest leads toward normal

to profound emotional disturbance, or to morphine. Cheyne-Stokes respiration may result from left ventricular failure, morphine, embolism or other cause. The frequently undetected pericardial friction rub may be heard in some cases. It is of definite assistance in diagnosis. Embolic phenomena may occur soon after the attack or later. Pulmonary or cerebral embolism is more common although infarction of kidney or spleen may occur. Peripheral gangrene may occur.[9] The development of mild congestive failure is common. The significance of generalized edema is serious.

Elevation of temperature with leukocytosis and increased sedimentation rate are common sequelæ of myocardial infarction. Generally speaking, the higher the leukocyte count the graver the

prognosis.[21] Change in sedimentation rate, being the most sensitive of the three, likewise appears to be the least dependable.

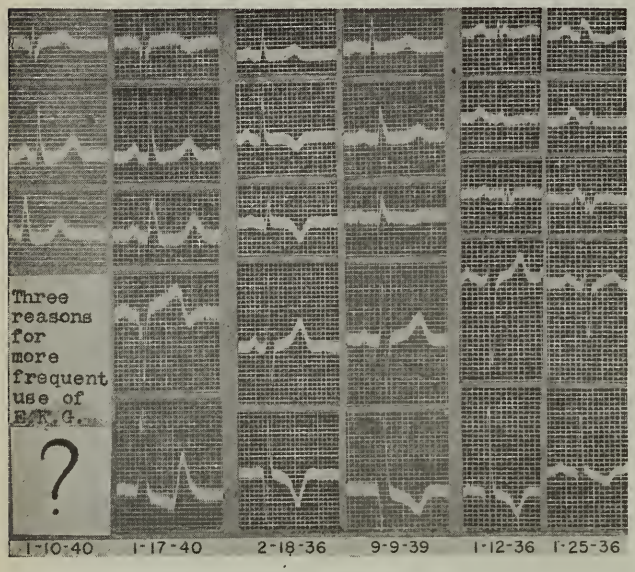


Fig. 3. 1/10/40. Recorded soon after a mild attack of chest pain. Male aged sixty-one, without previous complaint. In spite of definite S-$T_1$ elevation and S-$T_3$ depression, it was considered "normal" and five days later he was allowed to drive his car 300 miles to Chicago. Another record showed further evidence of myocardial infarction. Note the large, upright sharply peaked reciprocal coronary T wave in Leads II and III of this $Q_1T_1$ type of curve. Although frequently chest leads simply magnify diagnostic changes already present in limb leads, they give additional assurance that such changes will not be overlooked by the inexperienced observer. In a cursory examination he is less liable to overlook the marked chest lead change than to miss the corresponding, less marked abnormality present in the limb leads.
2/18/36. Routine electrocardiogram, male, aged fifty-seven, without complaint or other significant findings. Definite $T_2$, 3 inversion. Proper management was urged and refused. On 9/9/39 he returned with dyspnea, recurrent substernal pain and other evidence of advanced cardiovascular failure. Electrocardiogram was not remarkable, for age, at this time.
1/12/36. Male, aged forty-three, without previous complaint, had a "cold on chest with cough," was treated for "flu" by first M.D., and three weeks later decided he had asthma; specialist sent him home with a bottle of Digifortis; after the first dose, collapse, left hemiparesis, and persistent symptoms and findings of advanced heart failure ensued.
1/25/36. Note minor, but definite, variations from previous record. Died 2/20/36.

Differential diagnosis involves a consideration of many conditions[5,9,28] listed in Table I. Adequate discussion of this phase of the subject is beyond the scope of this presentation.

In some cases pain is so severe that angina seems questionable, yet other readily apparent evidence of occlusion is absent. A mild fever or slight leukocytosis is of some help. A pericardial friction rub, if detected, is of definite assistance. An electrocardiogram may establish the diagnosis. Should it fail to do so, a single record should not be accepted as final evidence. Further graphic study is essential.

At times a severe anginal attack and coronary occlusion can not be differentiated by ordinary

TABLE I. DIFFERENTIAL DIAGNOSIS OF CORONARY OCCLUSION

Acute Indigestion
Ptomaine Poisoning
Acute Heart Failure
Cerebral Hemorrhage
Cerebral Thrombosis
Cardiac Arrhythmias
Dissecting Aneurysm
Acute Pericarditis
Cardiac Dilatation
Cardiac Neurosis
Luetic Aortitis
Effort Syndrome
Angina Pectoris
Malingering

Bursitis
Pleurisy
Pneumonia
Pneumothorax
Herpes Zoster
Massive Collapse
Pulmonary Embolism
Carcinoma of Bronchus or Lung

Gall Stones
Peptic Ulcer
Spastic Colon
Tabetic Crisis
Acute Gastritis
Acute Appendicitis
Acute Pancreatitis
Diaphragmatic Hernia
Carcinoma of Stomach or Duodenum
Impending Diabetic Coma

Arthritis of Shoulder Joint
Incarcerated Inguinal Hernia
Arthritis—Costochondral Junction
Spondylitis of Cervical or Dorsal Spine
Rupture of Heart, Valve, or Papillary Muscle

methods. Persistence of the pain, for an hour or more, is highly suggestive. If occlusion is considered likely, it is a gross error to permit the patient to return to work or even to become ambulatory without the benefit of electrocardiographic examination. It is in such an instance that portable equipment has proven most valuable.

When the location of the pain is abdominal, disease of the gall bladder, stomach, duodenum or pancreas may be closely simulated. Consideration of blood pressure, sex, habitus, occupation and heredity of the individual are factors of importance.

**There is an important group of cases characterized by absent or insignificant pain.[13] The occurrence of painless coronary occlusion, with[45] or without[30] myocardial infarction, is becoming more widely recognized. It is to be**

expected that the previously reported low incidence of painless,[29] as well as atypical coronary occlusion, will increase with the more widespread use of electrocardiograms in diagnosis. Likewise, there will be a decrease in the occurrence of "prodromal pain" in coronary occlusion.[6] The more widespread use of serial curves in the study of patients with the minor complaints of coronary disease, or of mild or atypical pain equivalents, will bring to light a surprising number in which an occlusion of a lesser coronary branch, and occasionally even of one of the larger coronary vessels, has occurred. Minor attacks can not be too carefully and rigidly studied.

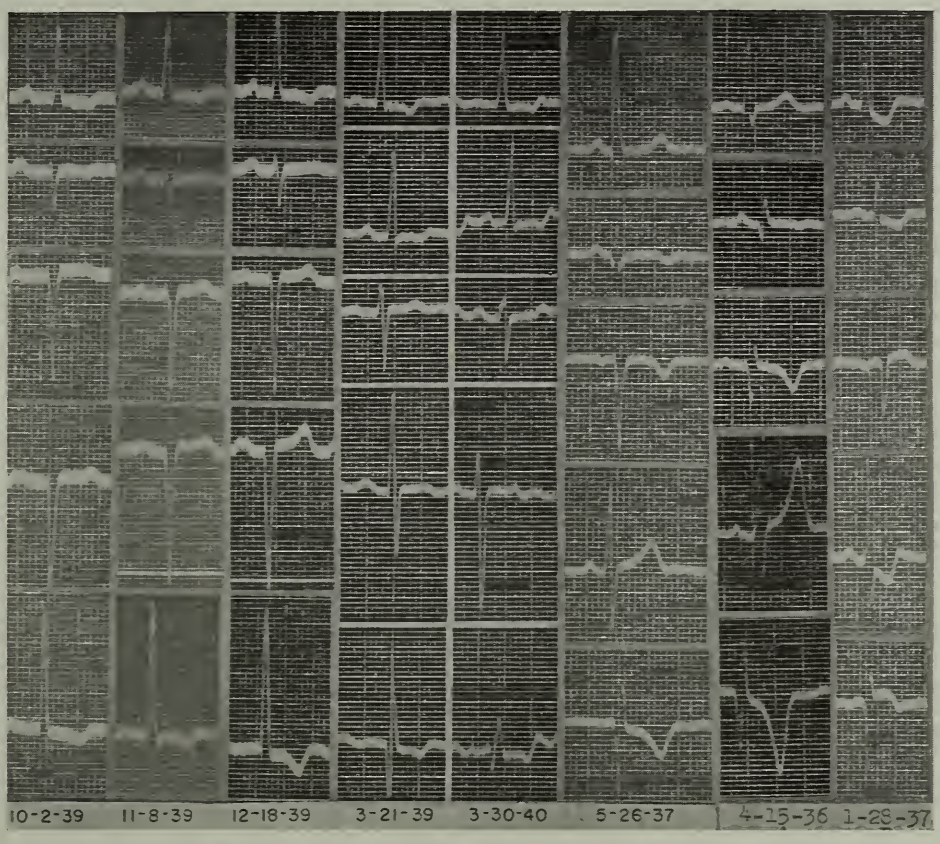


Fig. 4. 10/2/39. Male, aged sixty, with attacks of acute dyspnea, interpreted as recurrent "colds on the chest" during the previous nine months. A curve commonly associated with arterial hypertension and changes suggestive of coronary occlusion, confirmed by subsequent records on 11/8/39 and 12/18/39. Diagnosis of generalized arteriosclerosis, arterial hypertension, hypertensive heart disease with cardiac hypertrophy, left heart failure with coronary insufficiency, on the basis of an old coronary occlusion, was made. Absolute bed rest was advised. Pulse 110. Blood pressure 108/90, one week later 88/66; has not been above 90/70 since. 10/15/39, embolism of the right lower pulmonary lobe. Up and about since 11/15/39. Comfortable and symptom-free if activity is limited to two-block walk twice daily. If the initial record is of this type, diagnosis of occlusion is often difficult. Serial curves are frequently essential. Arterial hypertension and sequelæ were determined from the initial record.
3/21/39. Female, aged seventy, illustrates difficulty in the diagnosis of occlusion in hypertensive type of curve.
3/30/40, a subsequent record.
5/26/37. A $Q_3T_3$ type of coronary occlusion curve, in a man, aged fifty-four, with established arterial hypertension. (4/15/36) A $Q_3T_3$ type of coronary occlusion curve with large T waves in chest leads. (1/28/37) A type of curve commonly associated with lateral infarction. The characteristic electrocardiogram of lateral infarction reveals[58] depression of the S-T interval in Leads I and II, absence of signs of posterior infarction in Lead III, and a depression of the S-T interval in Lead IV, with elevation thereof in Lead V, which is typically more marked when the chest electrode is placed over the fifth interspace in the left midclavicular line than when it is more medially located. Left axis deviation may or may not be present. Confusion in interpretation may readily arise; the curve of a lateral infarction not being recognized, for several reasons. Digitalis effect, at times, may closely simulate this type of record. The graphic changes of an acute lateral occlusion may rapidly disappear. Confusion results when the electrocardiogram is not recorded until several days after the accident. The incidence of auricular fibrillation in this group is high. Much confusion results, when, because of the fibrillation, digitalis is administered before an electrocardiogram has been recorded. The graph of lateral infarction may closely simulate the typical curve of an established arterial hypertension.

The sudden onset of auricular fibrillation or flutter, ventricular tachycardia or heart block

in a patient without previous cardiac findings, especially if recently known to have had a normal electrocardiogram, is highly suggestive of occlusion.[10]

day to day. It is from this characteristic that serial curves derive their importance.

The occurrence in the electrocardiogram of flattening of the S-T interval and T wave, pro-

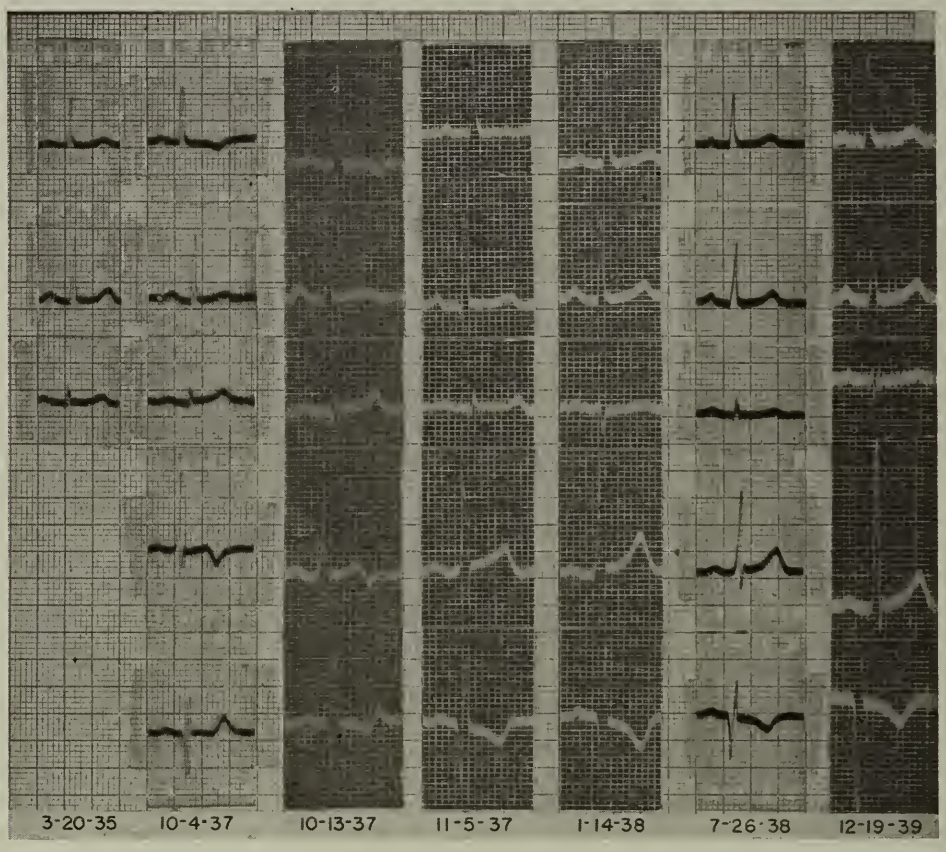


Fig. 5. 3/20/35. Previous electrocardiogram. 10/4/37, male, aged sixty-one, without previous complaint, had severe substernal pain with hemoptysis. 10/5/37, pulse 80 and regular, blood pressure 116/80, temperature 98.6, left heart border 2 cm. out. No murmur or thrill. Tones distant. Liver and spleen not felt. No ascites. No edema. 10/6/37, blood pressure 106/76, only change. 11/22/37, up and about. Post-occlusion pain in left shoulder. Considered to be "arthritis." Dentist removed nine teeth 11/25/37 and seven more 11/27/37, without relief of pain. Returned to work 12/22/37. Full activity without complaint since. Note persistence of initial positive ventricular deflection and incomplete reversal of polarity of the T wave with early return to normal contour in the chest leads of this $T_1$ type of coronary occlusion curve.

It is possible that, rarely, acute myocardial infarction may be overlooked in spite of apparently adequate study.

Arteriosclerosis in general is a progressive lesion and coronary disease is no exception to the rule. Thrombosis with occlusion, likewise, reveals this tendency to progression. A mild attack often precedes a major occlusion, or there may be a series of mild attacks, since thrombosis of a small branch may extend to the larger vessel from which the branch is derived; the process finally involving a much larger vessel than the initial lesion (Fig. 10). Again the process of organization within the area of infarction results in graphic alterations which change from

longed auriculoventricular or intraventricular conduction and bundle-branch block are common evidences of coronary sclerosis (Fig. 1).

Pardee[38] described a large Q wave in Lead III, which is the most frequent graphic sign of chronic coronary disease (Fig. 1*b, d, e*).

Regarding the electrocardiographic changes following an acute coronary occlusion, Pardee[37] states, "Not all of these changes are to be found in every record, but enough of them are present to give it a characteristic appearance."

The characteristic elevation or depression of the S-T interval with reciprocal change in Leads I and III have been described.[39] These typical alterations following infarction of the left ven-

tricle, in the vast majority of instances, localize the region involved, which in turn usually indicates the coronary artery occluded[1] (Fig. 2).

As a result of the above patterns the majority of coronary occlusion curves fall into two definite and distinct topographic groups, which agree essentially with the specific, muscle bundle, method of localization.[41] A $T_1$ type which at times may appear as a $Q_1T_1$ type[51] indicates occlusion of the left coronary artery with infarction of the anterior apical portion of the left ventricle. A $Q_3T_3$ type, rarely seen as a $T_3$ type, indicates obstruction of the right coronary artery with infarction of the posterior basal portion of the left ventricle.

Infarction of the lateral wall of the left ventricle, due to occlusion of the left circumflex artery, gives a less typical pattern[58] (Fig. 4, 1-28-37).

A large P wave occurred in thirty-two (80 per cent) of forty cases of coronary occlusion studied; an amplitude of over 2 mm. being noted in sixteen (40 per cent) of these cases.[34] Widening and notching frequently accompanied this increase in amplitude. The changes were more frequent in Leads I and II than in Leads II and III. They were always present in Lead II (Fig. 3). It is suggested that these changes in Leads I and II are associated with left auricular dilatation. An increase in amplitude of the auricular sound, as recorded in stethograms, has been observed following acute coronary closure.[3]

Low voltage commonly develops following occlusion.[47] Frequently it is of definite diagnostic assistance. A low voltage of electrocardiogram of a man in his forties, without previous cardiac complaint, definitely suggests the occurrence of a coronary occlusion, even in the absence of pain or other manifestations thereof, and should be so considered until proven otherwise (Fig. 3).

"Attention is drawn[7] to a large, upright, sharply peaked T wave—as diagnostic a feature of the

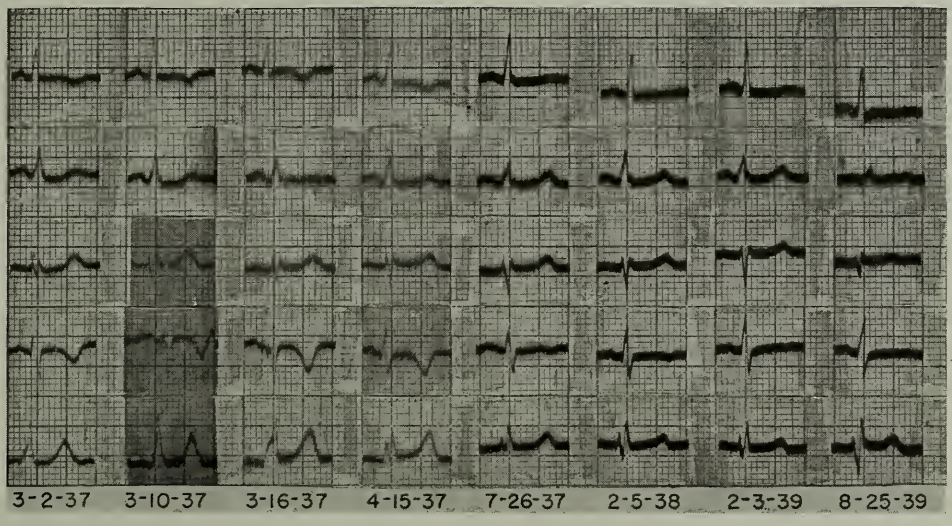


Fig. 6. Serial curves of $T_1$ type following infarction of anterior apical portion of left ventricle.

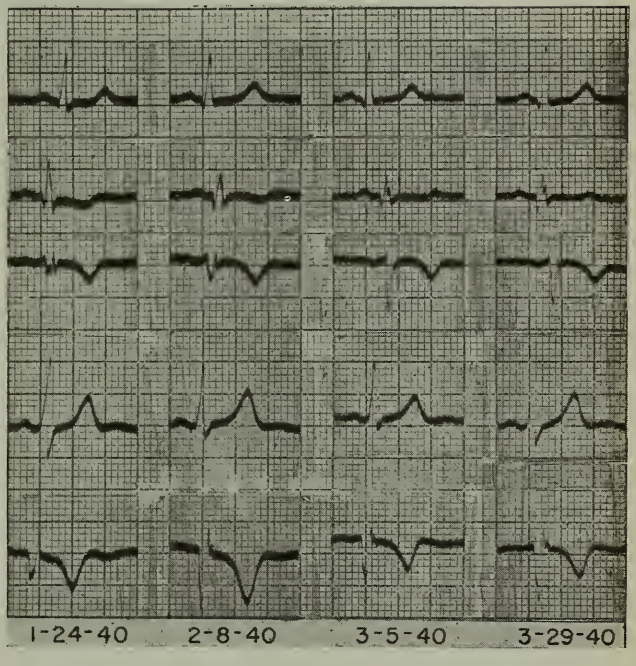


Fig. 7. Serial curves of $Q_3T_3$ type following posterior basal infarction.

coronary occlusion type of curve as the inverted cove-shaped T wave of which it is the inverse image—most commonly found in Leads II and (Fig. 7). It may well be referred to as the "reciprocal coronary T wave." As an associated change it aids in the diagnosis of coronary occlusion as does the low voltage curve and large $P_2$ change.

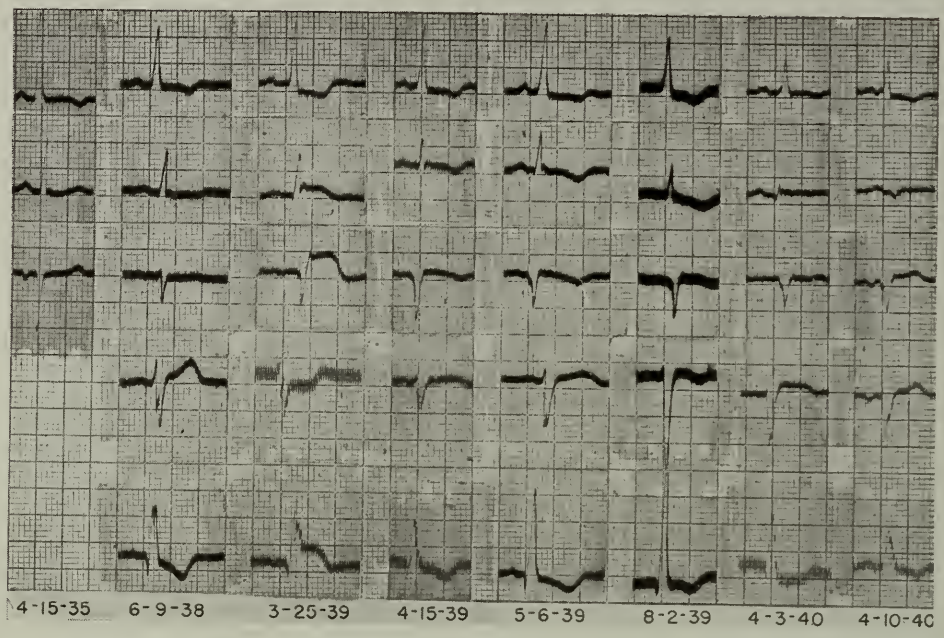


Fig. 8. Posterior basal infarction following old anterior apical infarction.

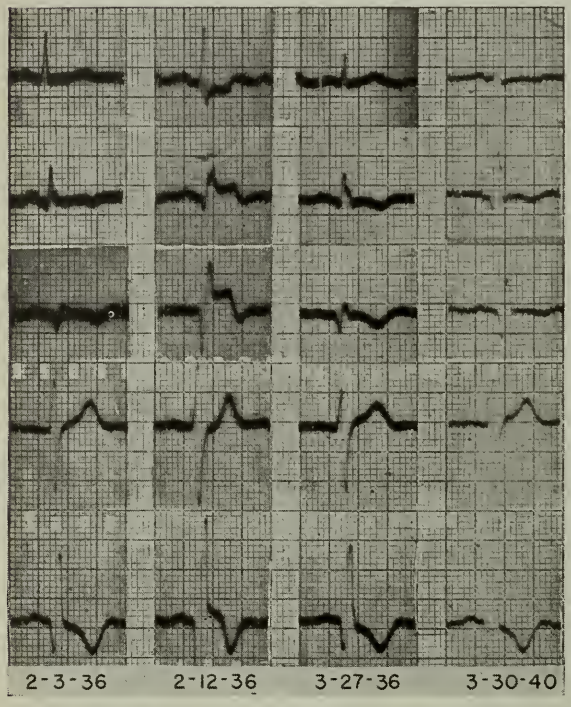


Fig. 9. Posterior basal infarction following old infarction of the same $Q_3T_3$ type.

III of the $T_1$ type of coronary occlusion curve" (Fig. 3). Basis for this alteration is the long since recognized reciprocal relationship of Leads I and III. Such a reciprocal T wave may also occur in Lead I of a $T_3$ type of electrocardiogram

Much assistance in the electrocardiographic diagnosis of coronary occlusion has been afforded by chest leads since their re-introduction[54] in 1932. In many cases they simply magnify diagnostic changes already present in the limb leads. In many instances they are normal in the initial record and remain so in subsequently recorded serial curves. This is particularly true of curves from patients with posterior infarction resulting from obstruction of the right coronary artery. A thorough understanding of the significance of the changes that may occur in the particular chest lead being used is essential for dependable interpretation. Such knowledge can be acquired only by prolonged experince with a chest lead technic known to be dependable (Fig. 1*a*). This, unfortunately, is not true of some of the many types of chest leads now being recorded. Nevertheless, chest leads are of definte assistance in some cases, and in certain instances, arê essential for the diagnosis of coronary occlusion. This may be true in the patient with an old myocardial infarction. The absent initial positive ventricular deflection in chest leads,[35] at times, may be the only remaining evidence of an old coronary

occlusion; the limb leads having returned to a non-characteristic or even quite normal contour. Although not pathognomonic, it is the most dependable sign, in chest leads, of previous myocardial infarction.

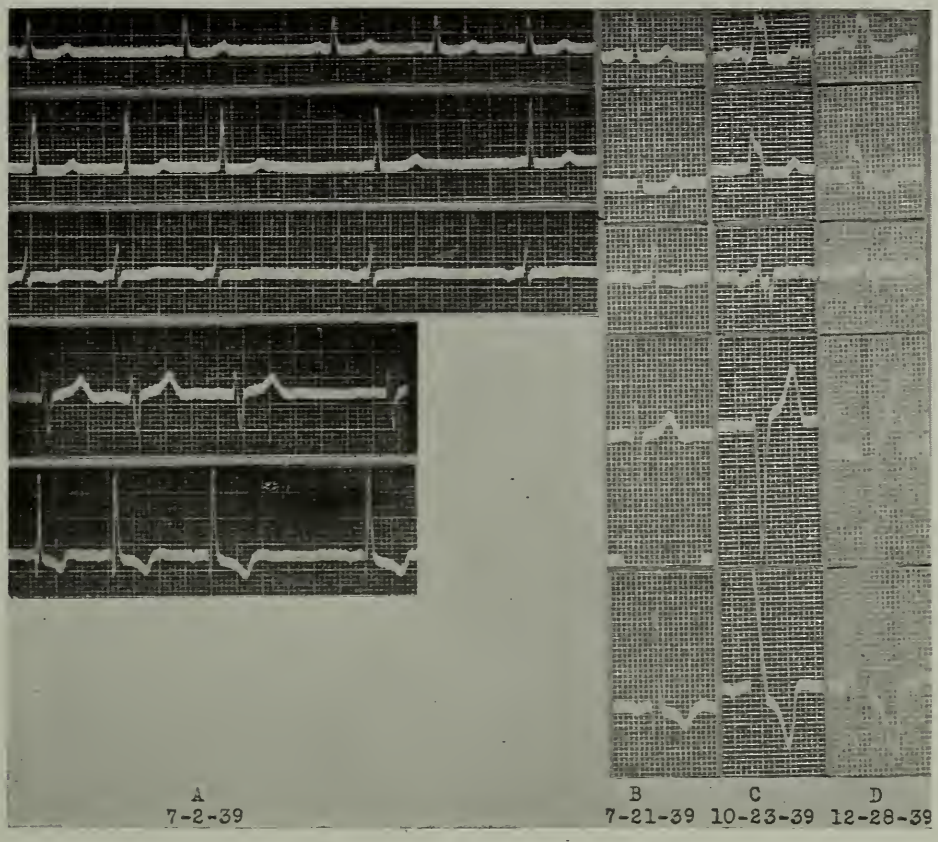


Fig. 10. Progressive change following repeated occlusion of lesser coronary branch. First attack 7/1/39. Second attack just before *c* was recorded.

As in limb leads, S-T interval displacement is the characteristic chest lead change signifying the early stages of an infarction. The S-T interval displacement in chest leads, since it frequently persists longer than the early changes present in the limb leads, may be of assistance in directing attention to the fact that the occlusion is of recent occurrence. This S-T interval displacement eventuates in reversal of the corresponding T wave, so that, as the changes in the area of infarction progress, the T wave may become oppositely directed and remain so indefinitely.

Reversal of the T wave in chest leads as an isolated finding, while not diagnostic of coronary occlusion, is a highly significant finding (Fig. 5). Whereas it commonly occurs in curves from children with normal hearts,[42] it is uncommonly seen in the adult electrocardiogram without other evidence of coronary disease.[17] The finding should be considered a definte indication for further study.

The incidence of an abnormally large T wave of normal polarity is of sufficiently frequent occurrence following a coronary occlusion to warrant serious consideration[57] (Fig. 4, *4/15/36*). Whereas, it not infrequently occurs in otherwise normal electrocardiograms from patients in whom no symptoms or findings of heart disease can be elicited, nevertheless, the finding of a large T wave, in chest leads, demands further graphic observation. A huge T wave of reversed polarity, while less frequent, is more significant. Although chest leads have not become the "open sesame"[43] in the diagnosis of coronary occlusion, nevertheless, they have become indispensable. Whereas, this is particularly true following myocardial infarction, it is likewise true, to a minor degree, in the study of the several less commonly occurring conditions.[2]

**Perhaps the most valuable recent advance, from a purely clinical standpoint, has been the**

more widespread appreciation of the importance of serial curves[12, 18, 27, 40] (Figs. 5, 6, 7, 8, 9). Diagnostic changes may be missed if a single electrocardiogram is recorded too soon after an acute coronary occlusion.[55] Arterial hypertension, aortic aneurysm, angina pectoris, congestive failure and digitalis medication, as well as pulmonary embolism and pericarditis, may cause confusion.

Whereas, a single record following a coronary accident may be diagnostic of myocardial infarction, at times, several curves may be required before the true situation is revealed. The progressive electrocardiographic changes following myocardial infarction, as seen in serial curves, recorded at properly timed intervals, are so characteristic, that there are few instances in which, with the assistance of such curves, coronary occlusion cannot be diagnosed. "No other condition has produced the complete typical picture of acute cardiac infarction."[55]

Again, there is no better way to follow the progress of the patient who has sustained an acute coronary occlusion than to observe the course of the typical graphic changes that result from the processes of infarct organization. Symptoms and findings are frequently undependable and at times misleading. Properly timed serial records are often of great assistance.

Finally, it should be emphasized that after adequate history, careful examination and essential instrumental aid, accurate, logical thinking remains the essence of diagnosis in coronary occlusion, as elsewhere in clinical practice.

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# Carcinoma of the Prostate*

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■ THIS report is the result of a review of one hundred and twenty-five cases of carcinoma of the prostate. Of course, it is impossible to present anything new on the subject of prostatic carcinoma, but an occasional review of the old hackneyed subjects is valuable.

There is only one other large group of patients which is so trying coming under the care of the urologist, namely, the group with cancer of the bladder. In both groups, the victim of the disease is likely to consult the physician late in its course, at a stage when palliation may be all that can be expected. This is usually more true of the victims of prostatic carcinoma than of bladder carcinoma.

This report contains cases treated in almost every known way, by masterly inactivity, radium, x-ray, suprapubic prostatectomy, perineal prostatectomy, resection, cystostomy, and combinations of these methods; so that it is possible to compare the results of different forms of treatment.

Of course, in comparing results there are other factors to be considered besides the method of treatment; among which are (1) the patient's chronological and physical age, (2) the extent of the process when discovered, and (3) the site of the origin of the growth.

That the chronological age and the physical age do not always correspond is, of course, well known. Some men at fifty are as old as others at seventy, and the hale and active octogenerian is no stranger to any of us. In general, it can be said that the younger the patient the more rapidly does a cancer develop. Many cases in the older group grow and metastasize so slowly that local obstruction is the chief inconvenience. Some of these do very well so long as urinary obstruction does not appear, or if that obstruction can be removed. Metastases and extension through the pelvis may be postponed for long periods and the patient live in comparative comfort. Such patients, carrying on very well with a cystostomy or following resection, are not especially rare. In some cases, where there is both hypertrophy and malignant disease, removal of the hypertrophied masses may be indicated. An example is one man in whom the diagnosis was made in 1928; suprapubic prostatectomy was carried out in 1931, resection has been done twice since, and he now at the age of 85 carries on vigorously, is in active business and is a factor to be considered in everything in which he is interested. In this instance the tissue removed at all three operations was definitely carcinoma, and rectal examination still shows a large stony hard mass in the prostatic region. Another man, a physician in his seventies, came in each year, for some years, for examination; no operation was done and there seemed to be no progress in the condition. He knew of the presence of the carcinoma and came in merely for a check-over.

In contrast are the patients in the younger group in whom extension and metastasis are very rapid; who rapidly go from bad to worse; whose discomfort and deterioration nothing can control, obstruction recurring rapidly, and pain in back and thighs being intractable; and whose end is welcomed by patient, relatives and physician.

Of course, the largest group comes in between

*From the Division of Urology, Henry Ford Hospital, Detroit, Michigan. Read before the Detroit Branch of the American Urological Association, April, 1940.

these two, and here the variation in physical age seems to play the greatest rôle. Some are slow in their course, some rapid. The great majority, however, are not seen until the condition is fairly well advanced, and the previous duration of the disease may be difficult to estimate. In the series covered by this review the average age of the patients was 64.9 years, the youngest being 40, and the oldest 93.

The site of origin apparently may be in any portion of the gland. It used to be thought that practically all started in the posterior lobe, but of recent years more intensive pathological investigation has shown more of them originating in the lateral lobes than was previously thought. However, it is still generally accepted that the usual point of origin is in the posterior lobe.

Spread of the disease is in three ways: First, by direct extension to the seminal vesicles and through the pelvis. Second, by way of the lymphatics, to the pelvic and abdominal lymph glands, and third, by way of the blood, chiefly to bone, and this may precede lymphatic spread. The recent work of Batson has thrown a great light on the distribution of metastases by way of the viens. Apparently almost three-quarters of all metastases are to bone; oftenest to the pelvis, spine and femur, and less often to the ribs. The region of the sacro-iliac joints seem to be the first place to look for the chalky appearance of metastasis. The chief source of confusion is the relatively rare Paget's disease, and here the configuration of the interior pelvic outline may be of aid, or x-rays of the skull may solve the problem, for in Paget's the skull is usually thickened. This differentiation may be of importance, for occasionally prostatic carcinoma may metastasize before rectal examination is suggestive, especially in the rare cases of soft carcinoma.

Undoubtedly, it is the most frequent carcinoma seen in the male. In 1939 these were reported in the *Journal of the American Medical Association* the death of 3,879 physicians, including 116 women. Among these deaths, 357 were due to cancer and of those due to cancer, the largest number—62—were due to carcinoma of the prostate.

Diagnosis is usually made by rectal examination, occasionally by the demonstration of typical bone metastases in the x-rays and in accustomed and skilled hands, by the use of a needle thrust through the perineum. This latter method requires an operator and (even more important) a pathologist of great experience in the method. It was not used in any of the cases considered in this report.

**Differential diagnosis is from tuberculosis, stone, and occasionally chronic inflammation. Usually there is no difficulty; the stony hardness and nodular character of typical carcinoma are unmistakable, though there may be confusion in early cases. Rarely seen are cases of tuberculosis in which there is much reason for error. Stone is usually comparatively easily recognized, and in case of doubt the x-ray will clear the diagnosis immediately. In a very few cases chronic inflammation gives rise to confusion, but, fortunately, most of these are in cases in which delay makes no difference and no harm results from waiting unitl the later course clears the diagnosis. The extent of the process when first seen is usually so great that if it be carcinoma it is beyond hope of cure. Occasionally in younger men, however, small nodules may be a source of anxiety unless they disappear under a short course of treatment.**

### Treatment

Lastly comes the black subject of treatment. Treatment in the vast majority of patients is unavailing so far as cure is concerned, and not too satisfactory so far as amelioration is concerned. In this series are cases treated by radium, deep x-ray, suprapubic prostatectomy, conservative perineal prostatectomy, radical perineal prostatectomy, transurethral resection and cystostomy.

Only seven patients were treated by radium and in only one did any benefit seem to result, and even he developed so much scar that the years he lived thereafter were made fairly miserable by the necessity for frequent dilatations under general anesthesia. He finally died of uremia.

Deep x-ray therapy was used in thirty-four cases and seemed to be valuable treatment for the pain produced by bony mestastases, but caused no particular retardation of the progress of the disease. Suprapubic prostatectomy in most cases makes matters worse, though where there is, in addition, much ordinary adenomatomous hypertrophy it may be done with benefit. Conserva-

tive perineal prostatectomy is probably better than suprapubic, but not much better.

Occasional cures result from prostatectomy in cases in which the presence of carcinoma was not suspected until the tissue was examined microscopically; and this fact may constitute an objection to resection for hypertrophy unless an essentially complete prostatectomy is done tranurethrally.

Suprapubic prostatectomy was done in eighteen cases, in eleven of which the diagnosis was not made before operation. The average length of life of the seven known to have carcinoma before operation was twenty-two months; of the other eleven it was four years, one living six years and another still living after seven years.

Resection to remedy obstruction is valuable, though it does nothing to hinder the progress of the disease, and recurrence of the growth may make repeated resections necessary. Resection was used in twelve cases known to have cancer, the average duration of life afterward being fifteen months. Of course, these were advanced cases before operation. Carcinoma was found in the tissue removed by resection for benign hypertrophy in four instances. One lived three years, another two and one-half years, one is alive and well after one year, and the other committed suicide after two and one-half years.

Cystostomy requires only brief consideration. In some cases it gives great comfort and as a palliative may be preferable to resection, particularly where urinary infection is great. It was done in only four of the cases considered here. There is only one instance of chorodotomy and none of alcoholic spinal injection.

The final method of treatment is radical perineal prostatectomy as advocated by Hugh Young and George Smith, who have had a rather large experience with it. This consists in the removal, perineally, of the whole prostate, including its capsule and all, or most of the seminal vesicles, with suture of the neck of the bladder to the membraneous urethra. This is applicable only to early cases before the disease has spread beyond the prostatic capsule, though George Smith advocates its use in some more advanced and borderline cases where he finds that the comfort and life of the patient are both prolonged. This method was used seven times with the following results:

One patient had good control of his urine and lived eight years, dying then of pneumonia.

One is alive and well after three and one-half years, with fairly good urinary control, losing a few drops if he strains or coughs.

One is alive and well after two and one-half years, completely incontinent.

Two died of metastases after a few months.

Two were operated on recently. Both of these are completely continent, and one states that erections occasionally occur.

## Conclusion

This paper may be concluded with a statement of our present attitude toward patients with carcinoma of the prostate:

1. If demonstrable metastases are present when first seen (40 per cent in this series), only palliation for obstruction and pain is possible.

2. In the other cases, where the diagnosis is unmistakable, in general nothing should be done until obstruction requires treatment or pain appears. For obstruction, resection seems the method of choice. However, particularly in some of the younger group, the use of radon seeds may be considered.

3. In the early cases the radical operation should be considered, especially in the younger patients. In most of these cases, the diagnosis must be in doubt until made by frozen section at the time of operation. Undoubtedly the field for this operation will be increased by more frequent early recognition of the disease. This means that stress must be laid on the importance of intelligent rectal examinations. Until rectal examinations are made more frequently and regularly as a part of a complete physical examination, and before symptoms appear, early cases will be rarely found. In the series reported here only seven cases were considered suitable for this operation. Of the last two, one was discovered incidentally in a man who came to the hospital for a routine check-up; the other, a man of forty-nine, was referred by one of the graduates of the hospital who had discovered it in the course of a general physical examination. Any firm nodule in the prostate of a man of fifty or over should rouse suspicion, and these nodules seem more likely to be found near the lower pole and near the mid-line. It is certain that the percentage of cures will not increase until this disease is more often recognized early enough to warrant radical removal.

# Arthritis

## A Contra-indication for Typhoid Vaccine Fever Therapy

By William J. Yott, M.D.
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■ ACCEPTED methods in the treatment of arthritis vary greatly, but one which is most universally recommended is treatment with foreign protein or fever therapy. Some authors specifically recommend Typhoid Vaccine Fever Therapy (especially in the active febrile type of case) and report having given thousands of them without any untoward results. The usual first dose should be 25,000,000 intravenously, gradually increasing the size in subsequent doses, so as to obtain a good chill and febrile reaction with each injection.

Cinchophen or atophan is well known as a drug used promiscuously by a great number of people who do not appreciate the dangers involved. In four books on materia medica only one mentioned that on prolonged administration hepatitis might occur and in none of the others was any mention of toxicity. In my experience I have found that druggists are very prone to recommend it, as are laymen.

Two years ago I encountered a case which impressed me with the possible danger of administering typhoid vaccine to a patient who had previously taken cinchophen. In no reference have I found the use of typhoid vaccine contra-indicated after cinchophen therapy although it is mentioned that typhoid vaccine should not be used in patients with chronic cardiac disease, in elderly patients, or those who give a history of tuberculosis.

A case report will help to clarify the point I am trying to make.

The patient was a well-nourished, white female, aged fifty-six, resting fairly comfortably in bed when first seen in the home. She was complaining of low back pain and pain in her extremities with swelling and tenderness in the phalangeal and metacarpo-phalangeal joints for the past six weeks with no noted temperature. The only history of previous treatment was that of having seen a chiropractor a few times with no beneficial results. There was no history of any medication and it was recommended that she enter the hospital for examination and observation.

She was admitted to the hospital, January 22, 1938, complaining of pain in hands, feet, legs and back for the past six weeks. About two weeks previously the patient had her first attack of pain in back, starting in both lumbar regions and radiating down the thighs. There was some headache associated with it and vomiting, but no other symptoms.

*Past History.*—Negative except for slight swelling of ankles at night. Appetite good, no dietary dyscrasies, constipation, diarrhea or other intestinal complaints.

She had diphtheria as a child and an appendectomy at 51.

*Laboratory examination* (1/24/38).—Negative urinalysis and Kline test. Hb. 75 per cent; R.B.C. 4,570,000; C.I. 9.5; W.B.C. 4,700 (58% P. Neut., 2% Baso., 38% Lympho., and 2% Trans.).

There was no positive findings on examination except for a low right rectus scar with good healing, slight dehydration from vomiting, and stiffness, tenderness, redness, and swelling of all the joints of the extremities.

*X-ray report.*—Pelvic and lumbar spines free of any pathology. The extremities showed an early hypertrophic arthritis.

At no time during the patient's stay in the hospital under observation did her temperature rise above 99. The third day when her vomiting had subsided and she felt much better, we gave her 10,000,000 typhoid intravenously with a good reaction and sent her home on the following day greatly improved on a purine-free diet, reduced iron, and a sedative.

On January 28, while still at home, and having had such good results from the first injection of typhoid vaccine, we gave her a second intravenous injection of 25,000,000 typhoid, at her request. This was followed on the next day by nausea and vomiting, and on the third day she developed a slight icterus which has gradually progressed until on February 16 she was again sent to the hospital. Since her last injection she had been symptom-free with no pain except for beginning pain in the joints of her fingers. The jaundice had gradually increased but at no time were there chills or fever or abdominal pain.

Two days before readmittance to the hospital she started to vomit and noticed that her stools were tarry in color. Vomitus contained "coffee ground" appearing material. Patient had been on a high carbohydrate diet since developing icterus.

Physical examination this time revealed an icteric patient with no petechiæ, scleræ were very icteric, and the liver was difficult to percuss out. B.P. 120/60; pulse 120; temperature 101; urinalysis 4 plus bile, 3 plus alb., many R.B.C. and W.B.C., casts. Hb. 78 per cent; urea 26.1 mgs.; dextrose 153 mgs. Stool: occult blood and urobilinogen present. Gastric con-

tents: occult blood, 10 per cent free HCl., 20 per cent total acid, no lactic acid. Icterus Index 100.

Condition gradually became worse so that on 2/18/38 she became comatose and expired in the afternoon.

Gross summary at autopsy was an acute yellow atrophy of the liver with intense jaundice and subsequent diffuse hemorrhage from the gastro-intestinal tract.

As has been stated, there was no history obtainable of her having taken cinchophen and it was impossible, due to the fact that the drug had been prescribed by a pharmacist and not by a physician, to make the family admit that she had taken this drug until the husband came in at a later date, and, when pointedly asked if his wife had ever taken cinchophen, admitted that she had taken small doses for approximately six weeks before I was called.

### Conclusions

1. Typhoid vaccine given intravenously to produce fever is contra-indicated in the presence of liver damage.

2. Cinchophen therapy in the presence of suspected liver damage is hazardous.

3. Cinchophen intoxication should be carefully watched for by the patient and physician during therapy.

4. Before any fever therapy, it is well to specifically question the patient as to having taken cinchophen or any kind of treatment which may have caused liver damage.

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### DIPHTHERIA: WHAT SHALL WE DO WITH IT?

*(Continued from Page 502)*

either into the stove or within cremating distance of its outer surface.

Dr. J. Lewis Smith reports excellent disinfectant results from the following:

"Rx Acidi carbolici, Ol. eucalypti, aa oz. 1; spt's terebinthinæ, oz. 8. Mix. Add two tablespoonfuls to one quart of water in a shallow pan, with a broad surface, and maintain it in a constant state of simmering in the room occupied by the patient."

It would certainly be desirable if the air in the room could be kept constantly disinfected, as Dr. Jacobi states that convalescents are sometimes re-infected from the room which they have themselves infected; besides which, experience has proven the above remedies to be efficient in the direct treatment of the disease. * * *

# Massive Arsenotherapy In Early Syphilis*

By Loren W. Shaffer, M.D.

Detroit, Michigan

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■ The five-day ultra-intensive treatment for early syphilis has aroused great interest. If early (primary or secondary) syphilis can be cured in five days with intensive treatment, the control of syphilis will be revolutionized. This treatment, if further observation proves that it is both safe and effective, offers the greatest advance in the therapy of syphilis since Ehrlich's introduction of salvarsan. The two main problems in syphilis control are the finding of early cases, and the holding of these cases to adequate continuous treatment for eighteen to twenty-four months. If treatment can be completed in five days, the almost insurmountable problem of holding such cases to adequate treatment will be solved.

The suggestion that very large doses of arsenicals might be given with safety in the treatment of syphilis was first made by Louis Chargin,[1] syphilologist to the Mount Sinai Hospital and the New York City Department of Health. It was based on the observation of Drs. Hirshfield, Hyman and Wanger,[2] showing that "speed-shock" could be prevented by very slow intravenous administration (60-90 drops per minute). Such administration also permitted the introduction of remarkably large amounts of highly toxic substances with complete impunity.[3] With the authorization of the trustees of the Mount Sinai Hospital, such work with arsphenamines was begun on Dr. Baehr's service in 1933.

In the first series, twenty-five patients with early syphilis were treated by Drs. Chargin, Leifer and Hyman.[4] Four to 4.5 gms. of neoarsphenamine was administered by continuous intravenous drip in five days; 87 per cent of

*From the Social Hygiene Division of the Detroit Department of Health and the Wayne University Medical School. Presented at the Secretary's Conference, Michigan State Medical Society, Lansing, Michigan, January 19, 1941.

these cases were cured, as far as it was possible to determine, at the end of five years. No additional cases were treated until 1937, when this method of treatment was resumed under a committee including Drs. Rice, Rosenthal, Mahoney, Clarke, Palmer, Dubois, and Baehr. Eighty-six cases of primary and secondary syphilis were treated with neoarsphenamine by the method used in the first group. A report of these cases was made before the American Medical Association in 1939, by Hyman, Chargin, Rice and Leifer.[5] Two-year cures were reported in 91 per cent of these cases. The incidence of toxic reactions was high, especially with neuritis. The only treatment fatality in the two series (111 patients) was due to hemorrhagic encephalitis, and further use of neoarsphenamine was discontinued in the fall of 1938. Arsenoxide (Mapharsen) was substituted.

When Mapharsen was first tried there was no experience available with its use in larger dosage. The usual recommended dose is one-tenth of the dose of neoarsphenamine. Since 4 to 4.5 gms. of neoarsphenamine was used in the preceding series, a total dose of .4 gms. or 400 mgs. of Mapharsen was administered by intravenous drip similar to that used with neoarsphenamine. It soon became obvious that the toxicity of Mapharsen was so slight that increased dosage could be safely employed. Because of failures with smaller doses, the dosage was increased to 700 mgs. and then by slow stages through levels of 800, 1000, 1100 and finally to the now recommended standard dosage of 1200 mgs.[6]

### Technique

Mapharsen is administered at the rate of 240 mgs. per day, daily for five days. It is given at the rate of 20 mgs. per hour dissolved in 200 c.c. of 5 per cent glucose solution continued for twelve hours. This represents a total daily dose of 2400 c.c. of 5 per cent glucose solution and 240 mgs. of Mapharsen. This is truly heroic dosage since it represents a daily dose of four times the amount usually injected (60 mgs.) and a total of 20 standard doses in five days. The injection is given by slow drip at an approximate rate of 3 c.c. per minute from a gravity burette. A vein on the forearm below the cubital fossa is selected to permit movement of the arm. Approximately 330 cases have now been treated with Mapharsen by the New York group.

### Reactions

The most frequent reactions encountered are gastro-intestinal, and secondary fevers, occurring usually on the day after treatment is completed. Such febrile reactions are frequently associated with a toxic skin eruption of very temporary nature. No cases of exfoliative dermatitis have been encountered; likewise, no cases of blood dyscrasias, renal or marked liver damage have been encountered. Neuritis, which occurred in 35 per cent of the cases treated with neoarsphenamine and was quite often severe, occurred in only 1.6 per cent of the Mapharsen series and was very mild in character. The most feared reaction is hemorrhagic encephalitis of which there were two cases in the neoarsphenamine series (111 cases), one resulting fatally, and three in the Mapharsen series (330 cases) one being rather severe but resulting in recovery, and two mild cases. Therefore, such treatment should not be recommended for general use until more information as to the expected frequency of such potentially serious reactions is available.

### Results

A longer period of observation will be necessary to appraise adequately the results of treatment with the Mapharsen group. Experience with relapse in early syphilis and with the Mapharsen group observed for a longer period of time would warrant the general statement that if relapse is to occur it will develop within one year. In the cases in the Mapharsen series receiving a total dose of less than 1000 mgs., there were twenty-three failures or 15 per cent of the 157 cases so treated.[6] The patients receiving 1200 mgs. have not been observed for sufficient time to attempt appraisal of final results, but latest reports suggest that cure is expected in 91 per cent of these cases. The course of treatment has been repeated in the majority of cases where failure has occurred with success expected from this second course and without any greater incidence of reactions.

This method of treatment is now being tried out in many centers. The U. S. Public Health Service is supervising its use in at least one center in each of the states of the North Central group, consisting of Michigan, Ohio, Indiana, Illinois, Iowa, Wisconsin, Minnesota, and South Dakota. On the basis of data collected from a large series of cases treated in many centers, it is hoped that a fairly accurate and rapid appraisal can be made. An appraisal is particularly urgent since such intensive treatment would be ideal for use in our military forces.

Many possible variations, simplifications and improvements of this method of treatment suggest themselves. These may be worked out in the future. The immediate problem is confirmation through more extensive use of the original New York method of treatment.

One hundred and seventy-five cases of primary and secondary syphilis have been treated in Detroit with the assistance of Federal funds. A slight modification of the New York Plan was used. The cases were diagnosed in the Social Hygiene Clinic of the Detroit Department of Health and hospitalized at Receiving and Herman Kiefer Hospitals. This program of treatment was started in November, 1939. Males only were treated in the New York series. The Detroit series is equally divided between males and females. There have been no serious reactions. No suggestive symptoms of hemorrhagic encephalitis have been present to our knowledge. Results of treatment are paralleling quite closely the New York experience.

It is unfortunate that this method of treatment has received so much premature publicity through newspapers and popular journals. It has not been sufficiently emphasized in such publicity that this method of treatment, although promising, must still be considered experimental; that it is to be used only in hospitalized cases under close observation for evidence of intoxication; and, finally, that it should be considered only, for the present at least, in cases of early syphilis in the primary or secondary stage. There is very little therapeutic experience with massive therapy in latent or late syphilis. Syphilis in pregnancy may possibly prove a promising field, but a potentially dangerous one. Results in latent or late syphilis would be difficult to appraise, and clinical experience with therapy in this field would suggest that its use would not have sufficient promise to justify its risks.

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# Fractures of the Neck of the Femur

## A Technique for Rapid Nailing Preliminary Report


By A. D. La Ferté, M.D.
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■ It has been long recognized that fractures of the neck of the femur are difficult to treat, and for that reason various methods of mechanical fixation have been suggested. J. B. Murphy reported excellent results in 1912 by using a twelve penny nail in the fixation of ununited fractures, while Smith-Petersen reported a series of twenty-four cases in 1931 covering a period of six years, in which he had used a three flanged nail. In 1932 Wescott reported a modification of the Smith-Petersen procedure, and Johansson described a further modification by using a cannulated nail introduced over a Kirschner wire. In 1934 King reported results with his method somewhat similar to that of Johansson, while Moore published the method and results obtained

by the use of three nails or pins in 1934 and 1936. Various other forms of mechanical fixation material have been introduced which have not appealed to surgeons as have the use of nails and pins. Plummer has done excellent work on the method of localizing the nail and Henderson has recently reported on a screw which he has used in these cases.

Fig. 1. Plumb line over coin.

Fig. 3. Tunnel and end pieces on ordinary operating table.

**It is my desire to discuss the subject from a point of view which, I believe, has not been mentioned: namely, the time element of introduction as well as the anesthetic time when using the various methods.**

### Age and Condition of Patients

Since fracture of the femoral neck occurs more often in elderly people the time element in reduction and fixation is important, as such patients cannot be expected to tolerate prolonged anesthesia and surgery without shock. It is in order to minimize this danger that I desire to present a method which reduces the time to a minimum in reducing the fracture and introducing the nail.

Fig. 2. Thigh in internal rotation.

### Elimination of Multiple X-ray Examinations

It has been my experience in the reduction of fractures of the neck of the femur that the roentgenogram made following the reduction almost always showed a good apposition of the fragments; in those in which the apposition was not perfect, any subsequent manipulation failed to improve it. And further, the position in these few cases has always been satisfactory for nailing.

**With this observation it was decided to eliminate post-reduction x-ray examinations made with the patient under anesthesia, and to proceed immediately with the operation.**

### Localization of Head

To localize the head of the bone prior to nailing, a coin (10 cent piece) is placed just below a point half way between the anterior superior spine of the ilium and the spine of the pubis. This is held in position by a small square of adhesive tape. A roentgenogram is then made prior to anesthesia with the tube centered with a plumb line over the coin (Fig. 1). After the film is developed the relationship of the coin-shadow to the head of the femur is noted, and, whether or not the shadow is superimposed over the center of the head, an exact relationship is established to direct the nail.

Even though the coin is placed by a similar measurement in each case, experience shows

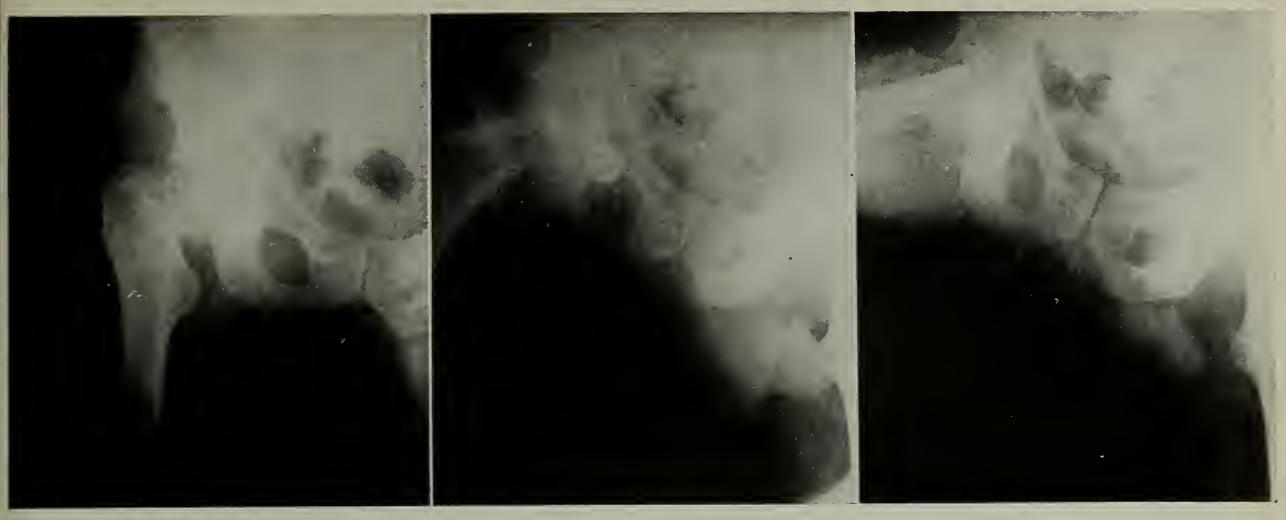

Fig. 4. Case 4.

that its relationship to the head of the bone is not constant. This, I believe, proves the futility of using a marker placed by measurement only, and not localized by a roentgenogram as described.

### Antero-posterior Direction of Nail

The antero-posterior direction in which the nail is to be driven is more difficult to estimate than the vertical since the angle of ante-version of the neck is not constant; therefore I do not feel that any given number of degrees of internal rotation will necessarily place the neck of the bone parallel with the operating table. Following the reduction of the fracture, an assistant holds the knee flexed to 90 degrees and the thigh is internally rotated to a tension just before elevation of the pelvis would occur on the fracture side. The internal rotation at this point will place the neck of femur on a plane parallel with the tunnel upon which the patient rests (Fig. 2).

### Tunnel

The tunnel is constructed of rigid material so that the weight of the patient will not cause the upper surface to sag and interfere with the introduction and removal of the x-ray film holder.

### Equipment and Nail

The operation is done on an ordinary operating table, the tunnel resting on the center section of the table, while at either end are wooden platforms fitted to the table to prevent sliding, and high enough to equal that of the tunnel; these end platforms hold it in position. At operation the tunnel opening is placed opposite the fracture side, thus allowing the x-ray technician to place his portable unit so that he may introduce and remove the films without interfering with the operator (Fig. 3). The length of the nail to be used is estimated by attaching to the skin with adhesive tape a calibrated metal bar four inches in length lateral to the trochanter on the unaffected side. A roentgenogram of the hip is made and since the metal bar is the same distance from the film as the neck of the femur, a comparison of the two allows one to secure a nail of suitable length.

### Operative Procedure

With the tunnel and platforms in position the patient is placed on the operating table. If the coin localization has not already been made it is done at this time. The lower abdomen and entire thigh are sterilized. The leg is wrapped in a sterile sheet or stockinet to allow for free handling; anesthesia, preferably pentathol sodium, is then given. The fracture is reduced by the Leadbetter method and the leg held by an assistant, with the thigh parallel to the table, slightly abducted and internally rotated as described. An incision, ranging from three to five inches in length, depending upon the depth of the soft tissues, is made from the upper border of the trochanter, allowing just enough exposure to locate the inferior border of the trochanter and to palpate the anterior and posterior limits of the shaft; it is important to palpate the posterior limit of the shaft since there is usually some expansion of the bone at this point and unless this is noted, the nail will be started too far anteriorly.

With the localization film in view on a shadow box, the coin shadow is noted, estimating the entrance and direction in which the nail is to be driven. The nail starter is seldom used, as oozing over the shaft of

Fig. 5. Case 6.

the bone may obscure the starter cuts; constant sponging delays progress. There has been no difficulty in driving the nail directly into the shaft and when it has been "driven home" the thigh is gently flexed to determine that the nail has not entered the acetabulum and that it is not impinging on the joint cartilage. The fragments are then impacted with three or four sharp blows on the Smith-Petersen impactor. The driver handle is removed, the wound covered and the anesthetic discontinued. An antero-posterior roentgenogram is then made with the thigh on the table and in internal rotation. Without moving the x-ray tube a lateral film is made with the thigh in 90 degrees flexion and slight abduction. While these films are being developed the wound is closed and a dressing applied. If the films disclose the nail to be in a satisfactory position the patient is returned to bed. If, however, the position should not be satisfactory, I would open the wound and proceed again.

## Reduction in Time

Since my first case, which took forty minutes and in which there was a lack of definite technique, and my second, which took fifty minutes, I have been able to reduce and nail these fractures in from seven to eighteen minutes; this time included the reduction of the fracture, the insertion of the nail, the taking of the films, and the closure of the wound.

It is not possible at this time to give the final results obtained in the several fractures nailed by this technique. These will, however, be reported when sufficient time has elapsed.

In this report the purpose has been to describe a technique by which fractures of the neck of the femur can, with reasonable certainty, be nailed in a few minutes, thus bringing all but the extremely feeble into the field of good operative risks.

## Summary

1. Nailing is the method of choice in the treatment of most cases of fracture of the neck of the femur, and in some cases of intertrochanteric fractures.

2. Most of these fractures occur in old, debilitated people who should not be subjected to lengthy operative procedures or prolonged anesthesia.

3. I have shown that repeated roentgen rays are unnecessary during operation.

4. Postoperative ray examination and operation are accomplished on an ordinary operating table.

5. A rigid upper surface on the film tunnel that will not sag is essential.

6. X-ray localization of the head by means of a plum line over a coin gives a dependable, relative position.

7. The operation of nailing such a fracture can be done efficiently in a few minutes, thus avoiding shock in most instances.

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# Postpartum Sterilization

By William G. Birch, M.D.
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DURING the past ten years there has been shown an increased interest in the problem of limitation of family size. Accentuated economic tension is in part responsible for this trend, but enlightenment of the laity with maternal welfare programs, supervised by governmental, medical and private agencies, also plays its part. Distribution of birth control information by the physician, once a crime, is now widely recognized and approved.

The techniques of spacing childbirths are multitudinous and of varying degrees of effectiveness. Where permanent cessation of childbearing function is desirable, the practice of ligation or resection of the Fallopian tubes has become standard. As usually carried out, an important obstacle in many instances was the delay in its accomplishment. The patient was advised to return in from three to six months following her last pregnancy for her operation. All too often she would return before that time, again in a pregnant state. Extra hospital expenses have also caused delay with pregnancy intervening. To circumvent this possibility, it has been the policy of some of the larger institutions to perform a cesarean section at term for the primary purpose of sterilization—a truly major proceeding.

In 1937, while I was Resident at the Chicago Lying-In Hospital, there was begun the practice of sterilizing the patient within twenty-four hours after her delivery, providing no potential infection could be detected. In 1939, Adair and Brown reported the results with fifty cases.

In early 1940, Hewitt and Whitley reported 106 cases sterilized an hour after delivery. Earlier literature includes only the work of Skajaa in Switzerland, who, in 1932, reported a series sterilized within one month of confinement. His series showed an alarmingly high incidence of embolism and thrombo-phlebitis, ranging as high as 40 per cent in some groups.

The recent reports are much more gratifying and indicate a solution of the problem which is both efficient and safe. The purpose of this paper is to discuss indications and stress technique as well as to present 35 more cases.

## Indications

At the present time one cannot make any definite assertions regarding the indications for permanent sterilization without risk of controversy.

**The medical profession as a whole does not agree as to what conditions warrant definite steps being taken to prevent occurrence of further pregnancies in an individual. In general it may be said that indications for the prevention of pregnancy are more flexible than they are for termination by therapeutic abortion once the process has begun.**

There are many who are advised against having more babies who should not be interrupted if they become pregnant. It is my feeling that those who are suffering from definite, life-shortening, organic disease should be spared the risk and anxiety of pregnancies which would undoubtedly further shorten their lives, or increase the degree of invalidism to which they are restricted. I feel it unwise to allow an individual who is able to carry on activity only if she has no more pregnancies, to become pregnant again. It appears logical to expect more responsibility of a mother toward her present family than toward any possible additions in the future.

**There is another large group of patients, besides those who fall within the category of organic disease, which presents a constant problem to the medical profession. This group might be called the Functional Group. The patients of this group may have no definite hazardous organic disease but they present a combination of symptoms and findings which make further childbearing highly inadvisable.**

One might divide this group into those who have poor protoplasm and those who have exhausted protoplasm. Among those of the first classification are individuals who are, and have

always been frail and ailing. Their resistance is poor and they react poorly to pregnancy. The physician is always relieved after their delivery and eventual recovery. These patients are a constant hazard in our morbidity and mortality statistics. Of similar make-up but different cause are those in which vitality is exhausted. Originally healthy and robust, poor living conditions and too frequent pregnancies have worn them out before their time. They appear to be years older than their actual ages. No physician in practice is unfamiliar with the pasty, haggard features of the woman who has had too many babies and has given too much of her substance in their procreation.

I feel that these women are entitled to cease childbearing, and with the consent of their husbands, to take active steps to prevent the possibility of its recurrence. It is for these two groups of patients that early postpartum sterilization is admirably adapted.

**It should, however, be stressed that the ultimate responsibility of the individual physician for deciding which patients should be sterilized is great. He should always bear in mind that this procedure is irrevocable, and should weigh the facts carefully in order that he might do nothing which could work great harm and unhappiness in years to come. Sterilization should not be done, except under urgent necessity without not only the consent, but the wholehearted endorsement of both the husband and wife.**

It should be carefully explained that menopause will not begin and that marital relationships will not be altered, in order to completely dispel any misinformation which the patient may have entertained.

### Prerequisite Conditions

Certain conditions must be observed if one is to minimize the risk associated with this operation. Though convalescence is remarkably uneventful in most instances, the physician must always remember that this is a major operation, and as such is safe only if the greatest care is exercised in pre-operative preparation, which should be started during pregnancy. It is strongly felt that the good results obtained are due to a great degree because local anæsthesia is used. With this in mind, the patient should be mentally prepared before going to the hospital. She should be told that she will have a local and that there will be some pain, but that the postoperative freedom from gas pains and vomiting more than offset the immediate discomfort.

She must be in the best possible condition. Anemia should be corrected during pregnancy, if present, and any vitamin deficiency eliminated.

Operation should not be undertaken if there is any acute infection such as coryza or pyelitis, or if the patient has undergone a prolonged labor or complicated delivery, with its potential danger of infection. It is felt by some that tubal resection may act to limit spread of infection, under such circumstances, but evidence is insufficient on this point, as yet.

### Technique

Pre-operatively, the patient is given, the night before, a moderately heavy dosage of a barbiturate. This insures a good rest after the tiring experiences of labor and leaves the patient slightly drowsy the following morning. A half hour before the scheduled time for the operation, she is given, depending on her size, either six or seven and a half grains of Seconal which is followed in fifteen minutes by a hypodermic of one-quarter grain of morphine.

By the time she reaches the operating room she will, in most instances be sound asleep and will not remember, afterwards, any of the details of her operation. Quiet is observed so as not to disturb the patient. The abdominal wall is infiltrated with 0.5 per cent novocain to which adrenalin has been added. This infiltration is carried out between the umbilicus and symphysis, special care being exercised to block off the segmental nerves to that region. An incision approximately 3 inches in length is then made just below the umbilicus through the skin and subcutaneous fat exposing the fascia. The fascia is then infiltrated, after which it is incised and the rectus muscles are separated. The peritoneum is not infiltrated, as this does not appear to have any effect upon its sensitivity. It is incised, care being taken not to cause undue tension, as this is most uncomfortable and rough handling may cause the patient to react. The forefinger of the right hand is slipped behind the right tube at the uterine cornu, and the uterus is slightly rotated bringing the tube into the operative field. The tube is then grasped with Allis' forceps, care being taken not to damage the utero-ovarian anastomosis which courses in the folds of peritoneum just below the tube proper. One half c.c. of novocain is injected into the interstitial tissue between the tubal serosa and the muscularis. This procedure is for two purposes: (1) to anæsthetize the tissues and (2) to cause separation of the tube proper from the serosa covering it. A longitudinal incision is made in the serosa for 1½

inches and the tube is separated by blunt dissection from the connective tissue in which it is imbedded. Two black silk ties are placed about the tube an inch apart and the intervening tube is removed. The incision in the serosa is closed, burying the proximal end in the mesosalpinx and turning the distal end out toward the peritoneal cavity. A similar procedure is carried out on the left tube and the abdomen is closed in layers.

It is to be stressed that during the entire operation the greatest care possible is taken to be gentle with the tissues handled, and to use strict aseptic technique. There is no doubt but that trauma to the pelvic organs is easier during pregnancy and the puerperium. The blood vessels are markedly dilated and the tissues softened and it is much more easy to bruise them than when they are in the normal state. When the operation is smoothly executed the bowel and the omentum are not disturbed—an important point in the prevention of distention.

Postoperatively, the patient is given morphine as required. The evening of the first day she is given a soft diet and liquids as desired. A general diet is given the third day. Enemas and laxatives are ordered as needed. Sutures are removed the seventh day and the patient is allowed to sit up on the same day if the incision is healed. She is sent home on the ninth postoperative day if she is convalescing satisfactorily. The dressing is removed after three weeks but otherwise the later postpartum period is treated in no different manner than in any other parturient.

## Cases

These thirty-five cases differ from those previously reported in the literature in that they are entirely those which occur in an average type private practice, whereas the others were clinic patients. Probably a slight majority of them are in a low income bracket, while some would classify as definitely underprivileged. All had prenatal care, including complete physical examinations, hemoglobin and red count determinations, Kahn tests, and frequent urinalyses, besides any specially indicated laboratory work.

There have been no deaths in the series and the morbidity, based on a reading of 38 degrees (C) at two different times after the first twenty-four hours, was 2.8 per cent (one case). The one case showing morbidity had lochiometra but rapidly became afebrile and was discharged on the ninth postoperative day.

The average age of all patients was twenty-eight years and four months. The average parity was four and one-half. These figures parallel those of the Adair and Brown series. The youngest patient was twenty-two and the oldest thirty-seven. Eighteen were classified as having organic disease as follows:

| | |
|---|---|
| Toxemia | 5 |
| Rheumatic heart disease | 2 |
| Chronic nephritis | 3 |
| Tuberculosis | 2 |
| Cardiac asthma | 1 |
| Cholecystitis | 2 |
| Psoriasis | 1 |
| Psychoneurosis | 1 |
| Diabetes | 1 |

The functional group totaled seventeen cases, most of whom were of the exhausted type. All showed definite impairment of general good health, although no serious organic disease could be demonstrated.

The type of delivery was predominately spontaneous. Spontaneous deliveries totaled twenty-three, of which 16 were repaired, two having old third degree lacerations. Twelve were delivered with forceps of which five had repair work done. Probably more repairs would have been reported, if it had not been that in the early cases repair was not attempted. More recently perineorrhaphy has been done whenever needed without any apparent lengthening of convalescence.

The average time elapsed postpartum before operation was 26 hours. The average postoperative stay in the hospital was nine and one-half days, with a maximum of fourteen days in the case of one patient who had a mild infection without fever, of a third degree repair.

Deliveries during the three years in which this series of cases was compiled totaled 480 cases, an incidence of sterilization amounting to 7.5 per cent. Nine cases were referred by other physicans with a specific request for sterilization based on either organic or functional indications. Had it not been for these nine cases the incidence would have been lower.

## Discussion

It is felt that the optimum time for postpartum sterilization is within the first twenty-four hours, after the patient has had time to

recover from the immediate effects of her labor, and after there is assurance that there will be no postpartum hemorrhage. Hewitt and Whitley performed their sterilizations an hour after their patient's delivery. It is felt that this might be hazardous from the point of view of possible hemorrhage. Skajaa's reports show increasing danger of phlebitism and embolism as time increases up to five weeks.

**The use of a local anæsthetic is important inasmuch as it causes a minimum of alteration from normal postpartum recovery. It has been found that local anæsthesia without sedation does not allow sufficient relaxation and prevention of anxiety to prevent straining and consequent exposure of other abdominal viscera with resultant increase in postoperative discomfort and distention. Sedation results in the patient sleeping most of the rest of the day of operation when she would otherwise be suffering her greatest pain. It is not unusual for her to have practically no discomfort after the first day. The use of a small incision is stressed, as this prevents protrusion of the other abdominal viscera and results in better and faster healing.**

## Conclusion

In conclusion I would like to say first that although indications for sterilization are discussed, it is not my desire to attempt to establish absolute indications for sterilization, as they can be only relative. For this, as for any other operative procedure, the individual physician is a better judge of whether or not a patient should be sterilized. There are those who believe in sterilization only for very serious organic lesions. There are those who do not believe in sterilization at all. It is not my desire to convert those individuals to another point of view, but rather to present, to those who have need for such an operation in their practice, a technique which has been found both safe and practicable.

**Widespread and indiscriminate sterilization can easily become a social menace but it is my belief that judiciously performed, it may well be a powerful prophylactic measure for further aid in reducing maternal morbidity and mortality.**

It has been the experience of those who have done this type of operation that where care is used in the selection of cases, and performance of the operation is accomplished with gentleness and skill, the patient undergoes no undue risk. Adequate prenatal care is to be stressed. Operation should not be done if labor has been prolonged or if delivery was complicated.

Tubal resection was performed in most instances in this series. Ligation after crushing no doubt is satisfactory, but it is our feeling that it is not as safe. It is a more simple procedure, with less opportunity for troublesome bleeding from the tube, but the time saved in doing it in preference to resection is insignificant where local anæsthesia is used. It is again to be stressed that this is a permanent procedure, without recall, and that the responsibility of decision should not be taken without considering all factors carefully. Where all conditions imposed are adequately met, we have found this operation will fulfill the requirements with a minimum of hospitalization and a maximum of efficiency and safety.

## Summary

1. Thirty-five cases of early postpartum sterilization in private practice are reported.

2. Possible indications are discussed but it is emphasized that each sterilization is an individual problem to be solved by the physician in charge of the case only after careful evaluation of all factors.

3. Local infiltration after adequate sedation is advised in place of inhalation anæsthesia, the former being more safe and resulting in less upset to the patient's postpartum routine.

4. Postpartum sterilization offers the advantages (1) of elimination of accidental pregnancy after childbirth in those in whom are found indications for sterilization and (2) of minimum hospitalization and expense to the patient.

5. Morbidity is not appreciably increased and no mortality has occurred in this series.

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# President's Page

## Afflicted-Crippled Children

The uniform Afflicted-Crippled Children Bill, drafted by the Michigan State Medical Society and seven other organizations interested in the indigent sick child, was not acceptable to Michigan's House of Representatives. Certain influences throughout the state made impossible the passage of this model legislation. Therefore, the medical profession must work (for two more years, at least) under the present crippled child and afflicted child laws which leave much to be desired.

Our doctors of medicine must continue, however, to give primary consideration to the sick child and to render proper care and treatment to these unfortunate crippled and afflicted adolescents, despite the weaknesses of the present laws. The profession must aid in the establishment of medical examination boards or filters to help control the patient-intake; otherwise the present appropriations, which should be adequate, will be dissipated.

Last but just as important, each physician must work diligently during the next eighteen months to inform his patients and the public concerning the vital need for improved legislation covering Michigan's crippled and afflicted children.

President, Michigan State Medical Society

# Editorial

## DISCUSSION CONFERENCES

■ In two months the Seventy-sixth Annual Meeting of the Michigan State Medical Society will be held in Grand Rapids.

Ever since last winter the officers of the Scientific Sections, The Council, and the Secretaries have been working steadily and continuously preparing a program even better than that of the Diamond Anniversary Meeting last year.

The splendid facilities of Grand Rapids in handling this meeting, in providing hotel accommodations, convenient meeting halls, and space for exhibits, make conditions favorable for success.

The adoption of open discussion periods in which the presentations of the day will be informally considered, with time for questions and requests for further clarification, is welcomed. This unique innovation should, in itself, warrant your intense consideration.

The Scientific Sections this year will have programs planned which will be more extensive and even more practical than those of previous years, and will present to the membership the best possible internationally known speakers on medical subjects as well as the cream of the state's practitioners and teachers.

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## VACATIONS

■ The most unsuccessful case that the average doctor treats is himself. When that patient begins to show signs of the wear and tear of day and night service to his profession; when the imaginary pains of his patients become real torture to the physician, or the stuffing and glutting of the obese matron down at the corner causes the doctor to bolt his own food and forsake his table companionship to prescribe; then it is time for him to take his own medicine, which usually is a vacation.

Without detracting from the value of medical meetings it must be clear that to this physician a convention is not a vacation.

There are certain rules for a doctor's vacation which are, if not paramount, indeed advisable: first, avoid telephones as you would a Grand Jury; second, never register as "Doctor"; third, don't take your medical cases along with you (if you distrust your colleagues, hide in one of your traveling bags a very small first-aid outfit); fourth, do not visit hospitals, medical schools, other doctors (unless they are close personal friends); fifth, don't put yourself on a time schedule; sixth, even if you don't obey any of these commandments, at least take a vacation.

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## THE PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of federal government under which shall be coördinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.

2. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease, the promotion of health and the care of the sick on proof of such need.

3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.

4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.

5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.

6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.

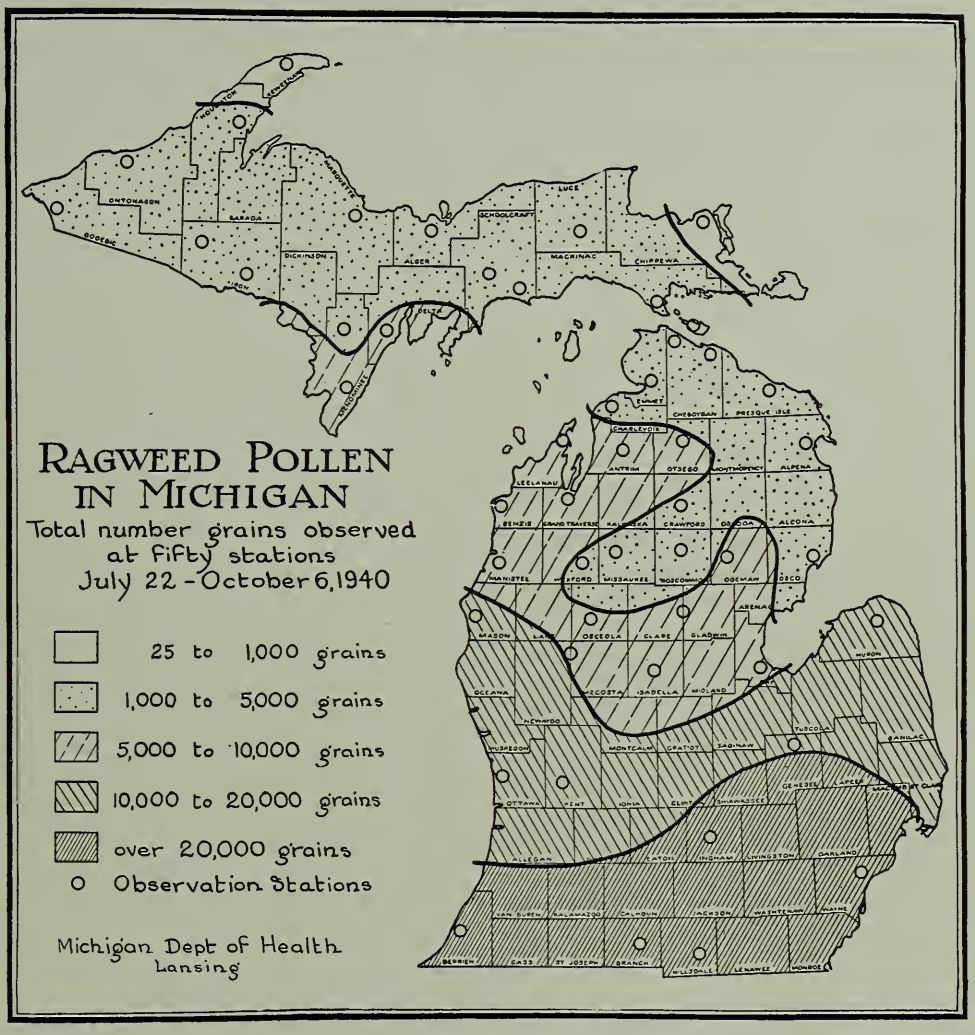
7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.

8. Expansion of public health and medical services consistent with the American system of democracy.

## REFUGE FROM RAGWEED

■ Last summer the State Health Laboratory of Michigan, aided by contribution from the Michigan Hotel Association, made a pollen count of areas throughout the entire state.

The map which is reproduced here by permission of the Michigan Department of Health is self-explanatory and should serve both as a guide to the physician and as an advertisement for the state as a refuge for those unfortunates who are allergic to the pollen of ragweed.




## MAY THE OSTEOPATH DO SURGERY?

Because of the similarity between the laws permitting the practice of osteopathy in Michigan and in Nebraska the following opinion of the Nebraska Supreme Court should be of interest to all physicians who ask the question, "May an osteopath practice medicine and surgery?"

Through the kindness of Mr. M. C. Smith, Executive Secretary of the Nebraska State Medical Association, it is possible to present this interesting and possibly suggestive decision.

This is a suit brought by the attorney general to enjoin the defendant, Roy Jackson Gable, an osteopathic physician, from engaging in the practice of medicine and operative surgery within this state and from publicly professing to be a physician, surgeon, or obstetrician. The defendant filed an answer in which he denied that he had ever engaged in the practice of medicine, or professed publicly any right to do so. He alleges, however, that he is an osteopathic physician, surgeon and obstetrician and asserts a right to engage in the practice of operative surgery and obstetrics and to hold himself out to the public as one qualified to do so. The attorney general thereupon moved for a judgment on the pleadings, which was overruled by the trial court, and a judgment entered in favor of the defendant. The state thereupon appealed.

The question whether the defendant may lawfully engage in the practice and dispensing of medicine is not an issue on this appeal. Whether defendant may lawfully engage in the practice of operative surgery and obstetrics and engage in the use of anesthetics in the manner alleged in defendant's answer are the questions presented by the motion for judgment on the pleadings. The correctness of the trial court's ruling on this motion is the controlling factor in this appeal.

The defendant alleges that he is a graduate of the American School of Osteopathy at Kirksville, Missouri, a school of osteopathy recognized by the American Osteopathic Association. On June 13, 1922, defendant was issued a license to practice as an osteopathic physician and surgeon by the department of public welfare of the state of Nebraska. The answer admits and

alleges that defendant has performed surgical operations, including tonsillectomies, appendectomies, circumcisions, an amputation of a toe, rectal operations, hysterectomies, operations for hooded clitoris and laparotomies, all of such operations being performed with instruments and by incisions of the patients' bodies; that he has engaged in the practice of obstetrics and has used anesthetics; all of which the defendant alleges that he will continue to do under claim of right.

It cannot be questioned that a person engaging in the practice of medicine and surgery without the required statutory license may be restrained by injunction. * * * If, therefore, the admissions and allegations of defendant's answer constitute the practice of medicine and surgery as defined by section 71-1401, Comp. St. 1929, the defendant should be enjoined from so doing. If said acts are within the scope of the practice of osteopathy as defined by our statutes on the subject, the defendant is then within his rights and not subject to restraint for so doing.

The question is raised whether the character and general duties of occupations classed as professions are determined as questions of law or fact. We think the rule is that they are questions of fact of which the courts will take judicial notice. Certainly, the question whether a specific act constitutes the practice of osteopathy is not subject to proof by expert witnesses. The absurdities which would be certain to follow such a construction of the rule in question are too obvious to require an exposition here. The general rule of pleading which admits are true all facts well pleaded upon the filing of a general demurrer or a motion for a judgment on the pleadings, has no application to facts of which a court may take judicial notice, and such demurrer or motion does not, therefore, admit a conclusion of law deduced from such facts.

The general rule seems to be: "There is apparently no dissent from the proposition that in the consideration of a pleading the courts must read the same as if it contained a statement of all matters of which they are required to take judicial notice, even when the pleading contains an express allegation to the contrary." * * *

Applying this rule to the pleadings before us, the allegations of defendant's answer to the effect that the acts admitted constitute the practice of osteopathy are mere conclusions of law. The allegation of a sound conclusion of law is always treated as superfluous and the allegation of an unsound conclusion is entirely disregarded. It matters not in the instant case whether the conclusions pleaded are true or not, for that which is judicially known may not be successfully controverted by pleadings, or made issuable by them. * * *

This court is, therefore, required to determine the meaning of the term "osteopathy" in the same manner as any other fact of which it is required to take judicial notice. It may resort to the definition and description of it given by the founder of the practice, by those who teach and practice it, and by the lexicographers who define it as a science. * * *

Much has been written by the founder of osteopathy, and others learned in the practice of its profession, as to the fundamentals of the science of osteopathy. To give a résumé of these writings would unduly lengthen this opinion. We think a fair conclusion to be drawn from all of them was ably expressed in Bragg v. State, 134 Ala. 165, 32 So. 767, where the supreme court of Alabama said: "The method of treatment by the practitioners of osteopathy is a system of manipulation of the limbs and body of the patient with the hands, by kneading, rubbing or pressing upon the parts of the body. In the treatment, no drug, medicine or other substance is administered or applied, either internally or externally; nor is the knife used or any form of surgery resorted to in the treatment. The practitioner himself performs the manipulations. The teaching and theory of those skilled in osteopathy are, that it is a system of treatment of disease by adjustment of all the parts of the body mechanically. It is taught that any minute or gross derangement of bony parts; contracting and hardening of muscles or other tissue; or other mechanical derangements of the anatomical parts of the body which must be in perfect order mechanically, in order that it may perform its function aright, nerve centers, arteries, veins and lymphatics, which must function properly in order that health may be maintained. It is taught that such interferences lend to congestion, obstructed circulation of blood and lymph, irritation of nerves and abnormal state or nerve centers; that the result is disease which can be cured only by righting what is mechanically wrong. * * * The essential things taught in the schools of osteopathy are anatomy, physiology, hygiene, histology, pathology and the treatment of diseases by manipulation. The repudiation of drugs and medicine in the treatment of diseases is a basic principle of osteopathy and a knowledge of drugs or medicines, their administration for the cure of diseases, the writing and giving of prescriptions, are not essential to the graduation of, and the issuance of diplomas to, students of osteopathy."

The well-settled definitions of osteopathy, in the writings of Dr. Andrew Taylor Still, its founder, and in the writings of recognized practitioners, as well as in the dictionaries and the decisions of the courts, all uniformly hold that the system of osteopathy administers no drugs and uses no knife. * * * With these definitions and observations in mind, the licensing statutes must be examined to determine the extent to which this definition has been modified in this state by legislative action. Section 71-1701, Comp. St. 1929, provides: "For the purpose of this article the following classes of persons shall be deemed to be engaged in the practice of osteopathy: 1. Persons publicly professing to be osteopaths or publicly professing to assume the duties incident to the practice of osteopathy. 2. Persons who treat human ailments by that system of the healing art which places the chief emphasis on the structural integrity of the body mechanism as being the most important factor for maining (maintaining) the organism in health." Section 71-1702, Comp. St. 1929, sets out certain exceptions which are not relevant in this suit.

Provisions are then made for the examination and licensing of those who would practice osteopathy. Among the requirements is the presentation of proof that the applicant was graduated from an accredited school or college of osteopathy. * * * The following section defines an accredited school of osteopathy. Among the conditions required is that the course of study must include the following subjects: Anatomy; chemistry; pathology; toxicology; pediatrics; general surgery; obstetrics; histology; physiology; hygiene; dietetics; practice, therapeutics, general diagnosis and technique; dermatology and syphilis; orthopedic surgery; gynecology; embryology; bacteriology; comparative therapeutics; nervous and mental diseases; jurisprudence, ethics and economics; genito-urinary diseases; and eye, ear, nose and throat. * * * The section following this provides: "Every license issued under this division shall confer upon the holder thereof the right to practice osteopathy in all its branches, as taught in the osteopathic colleges recognized by the American Osteopathic Association." * * *

The argument is made that as general surgery, orthopedic surgery, anatomy, pathology and other subjects are included in the required course of study in an accredited school of osteopathy, their practice is included in the statutory authorization by virtue of the use of the words, "The right to practice osteopathy in all its branches, as taught in the osteopathic colleges recognized by the American Osteopathic Association." The words of this statute do not authorize a licensed osteopath to practice everything that he is taught in an osteopathic school. It contains expressions which have a limiting as well as an authorizing effect. The prac-

tice authorized must be osteopathic and it must also be as taught in accredited osteopathic colleges. The fact that branches of medicine and surgery may be taught to increase the knowledge of the student in the anatomy and functions of the various parts of the human body for the purpose of better fitting him to practice osteopathy will not warrant him to invade those fields on the theory that they constitute the practice of osteopathy. The scope of osteopathy is well known and schools and colleges of osteopathy must stay within its boundaries, they cannot enlarge them. * * * In a case similar in principle, the supreme court of California said: "While the section contains the additional clause 'as taught in chiropractic schools or colleges,' the entire section must be taken as a whole and it cannot be taken as authorizing a license to do anything and everything that might be taught in such a school. A short course in surgery or one in law might be given, incidentally, and it would not follow that the section would then authorize a licensed chiropractor to engage in such other professions. It is not sufficient that a particular practice is taught in such a school. Under the terms of the statute it must meet the further test that it is a part of chiropractic, whatever that philosophy or method may be, and further that it shall not violate the provision which expressly forbids the practice of medicine. If such a practice is not a part of chiropractic but does constitute the practice of medicine, it is not authorized under this license even though it may be taught in such a school." * * *

This point is well summed up in Georgia Ass'n of Osteopathic Physicians and Surgeons v. Allen, 31 Fed. Supp. 206, wherein the court said: "His knowledge must be broader than his practice; he must know what he practices but may not practice all he knows."

The argument is advanced that the use of the words "osteopathic physician and surgeon" in the license implies the right to practice surgery. The word "surgery" used in its general sense in connection with the profession of osteopathy means surgery by manual manipulation and was never meant to include operative surgery as we now understand it. The correctness of this statement is evidenced by the very principles of osteopathy to the effect that the general use of a knife or other instruments in surgical operations was regarded as unnecessary and opposed to the osteopathic system of treatment. The practice of osteopathy and operative surgery has long been recognized as two separate and distinct things. Separate boards have been set up in this state for the examination of those applying for licenses to practice medicine and surgery and those desiring to practice osteopathy. It is urged that the principles of osteopathy have changed and that experience and learning have produced certain advances that must be recognized. If osteopathy has changed merely by a self-serving attempt to broaden its scope by invading fields requiring a different license, we can only say that the legislature has never recognized any such additions to the profession. If the changes are the result of advancements in the profession, of course, they still constitute the practice of osteopathy. But the practice of operative surgery by an osteopath is an invasion of the field of the physician and surgeon as it is generally known and is not an evolutionary advancement of the profession of osteopathy. * * *

Respondent argues that, as the act of 1919 * * * contained the provision that "Osteopathic physicians shall perform only such operations in surgery as was fully taught in the school or college of which the applicant is a graduate at the time of his attendance," it thereby recognizes operative surgery as a branch of osteopathy. This contention is too broad. Much of the difficulty in this class of cases has arisen because of the varied use of the term "surgery." It originated from the latin "chirurgia," meaning "hand work" or, as another writer puts it, "To work with the hand." * * * This is the meaning attributed to it in all the earlier writings on the subject of osteopathy and accounts for the general usage of the word in designating an osteopath as an osteopathic physician and surgeon. The invasion of the field of medicine and operative surgery as it is generally understood seems to be based on an attempt to broaden the definition of the term "surgery" as formerly used so as to include operative surgery. The field cannot be so extended. The words in the 1919 act must, therefore, be construed as referring to operations in surgery consistent with the practice of osteopathy as originally defined, which excludes the practice of operative surgery in its commonly accepted meaning.

We conclude, therefore, that an osteopathic physician and surgeon is not authorized under the statutes of Nebraska to engage in the practice of operative surgery and that the trial court was in error in holding to the contrary.

Realtor contends that the respondent cannot engage in the practice of obstetrics without a license to practice medicine and surgery as defined by section 71-1401, Comp. St. 1929. That a practicing physician and surgeon, properly licensed under the statute, may engage in the practice of obstetrics is not disputed. The right to practice obstetrics is not specifically granted by the statute authorizing the licensing of osteopathic physicians and surgeons. It is not disputed that respondent graduated from an accredited school of osteopathy, the requirements of which include the study of obstetrics. In the respects noted, respondent is in no better position than he was as to his right to practice operative surgery. But we are again required to examine the statutes to determine to what extent, if any, they have modified this position. Under the provisions of the 1901 act, an osteopath was required to report to the proper authorities all cases of contagious diseases, deaths or birth. * * * This same provision appears in the act of 1905. * * * In 1909 a new statute was enacted which provided that osteopathic physicians shall report all births the same as physicians of schools of medicine. * * * This provision was retained in the act of 1919. * * * In 1927 this section was amended to read as follows: "A birth certificate in the form prescribed by the department of public welfare, and conforming to all of the requirements of the United States census bureau shall be filled out by the physician in attendance, and signed in his own handwriting. If there is no physician in attendance, then said certificate shall be completed and signed by the parent or other person present. Such certificate shall be filed with the local registrar within five days after any birth." * * *

It will be noted that the present law does not specifically require an osteopath to file birth certificates with the department of public welfare, the requirement being that the birth certificate shall be filled out by the physician in attendance.

To obtain a license to practice osteopathy, respondent was required to exhibit a diploma issued by a regular school of osteopathy wherein the curriculum included instruction in certain subjects required by statute, one of which was obstetrics. He was also required to pass an examination in the required subjects. While these facts alone would not authorize respondent to engage in the practice of obstetrics, yet, when considered with the statute regarding the reporting of childbirths, together with the history of its development, we think the legislature authorized respondent, upon securing a license to practice osteopathy, to engage in the practice of obstetrics. As was said in Stoike v. Weseman, 167 Minn. 266, 208 N. W. 993: "Unless an osteopathic physician could lawfully attend a woman in childbirth, there would be no reason for requiring him to report the birth of the child." Of course, the present statute does not specifically require an osteopath to report births, but the former statute did, and we do not think the enactment of the present law evidences any intent to limit the practice of the osteopath in the field of obstetrics from that which had theretofore existed. It is

*(Continued on Page 565)*

## OUTLINE OF GENERAL ASSEMBLY PROGRAM

### Seventy-sixth Annual Meeting, Michigan State Medical Society

### Grand Rapids—September 17, 18, 19, 1941

| | Wednesday, September 17 | Thursday, September 18 | Friday, September 19 |
|---|---|---|---|
| *A. M.*<br>9:30 to 10:00 | Medicine<br>Russell L. Cecil, M.D.<br>New York City | Obstetrics (Maternal Health)<br>James R. McCord, M.D.<br>Atlanta, Georgia | ON THE SEVEN SECTION PROGRAMS<br>General Medicine<br>A. R. Barnes, M.D.<br>Rochester, Minn |
| 10:00 to 10:30 | Surgery<br>Elliott C. Cutler, M.D.<br>Boston | Medicine (Tuberculosis)<br>Charles E. Lyght, M.D.<br>Northfield, Minn. | Surgery<br>Harry E. Mock, M.D.<br>Chicago |
| 10:30 to 11:00 | VIEW EXHIBITS | VIEW EXHIBITS | Obstetrics & Gynecology<br>Richard TeLinde, M.D.<br>Baltimore |
| 11:00 to 11:30 | Syphilology<br>Francis E. Senear, M.D.<br>Chicago | Medicine<br>V. P. Sydenstricker, M.D.<br>Augusta, Georgia | Ophthalmology & Otolaryngology<br>Samuel Iglauer, M.D.<br>Cincinnati |
| 11:30 to 12:00 | Gynecology<br>George W. Kosmak, M.D.<br>New York City | Pediatrics<br>James Gamble, M.D.<br>Boston | Pediatrics<br>Harold K. Faber, M.D.<br>San Francisco |
| *P. M.*<br>12:00 to 12:30 | Medicine (Mental Hygiene)<br>Lawrence Kolb, M.D.<br>Washington, D. C. | Obstetrics<br>Wm. E. Caldwell, M.D.<br>New York City | Dermatology & Syphilology<br>S. Wm. Becker, M.D.<br>Chicago |
| 12:30 to 1:30 | LUNCHEON<br>VIEW EXHIBITS | LUNCHEON<br>VIEW EXHIBITS | Radiology, Pathology, Anesthesia<br>Bernard H. Nichols, M.D.<br>Cleveland<br>LUNCHEON<br>VIEW EXHIBITS |
| 1:30 to 2:00 | Anesthesia<br>Wesley Bourne, M.D.<br>Montreal | Ophthalmology<br>Alfred Cowan, M.D.<br>Philadelphia | Otolaryngology<br>D. E. Staunton Wishart, M.D.<br>Toronto |
| 2:00 to 2:30 | Surgery (Indus. Health)<br>A. J. Lanza, M.D.<br>New York City | Pathology<br>Shields Warren, M.D.<br>Boston | Dermatology<br>Carroll S. Wright, M.D.<br>Philadelphia |
| 2:30 to 3:00 | VIEW EXHIBITS | VIEW EXHIBITS | VIEW EXHIBITS |
| 3:00 to 3:30 | Pediatrics<br>Henry Poncher, M.D.<br>Chicago | Medicine<br>Chester S. Keefer, M.D.<br>Boston | Pediatrics (Child Welfare)<br>E. C. Mitchell, M.D.<br>Memphis |
| 3:30 to 4:30 | DISCUSSION CONFERENCES WITH GUEST ESSAYISTS | DISCUSSION CONFERENCES WITH GUEST ESSAYISTS | 3:00 to 4:00<br>Medicine<br>C. A. Doan, M.D<br>Columbus<br>4:00 to 4:30<br>Surgery<br>Owen H. Wangensteen, M.D.<br>Minneapolis |
| 8:30 to 10:00 | President's Night<br>Biddle Oration<br>in Hotel Ballroom<br>Speaker:<br>Alphonse Schwitalla, S.J.<br>Dancing | Smoker<br>in Pantlind Hotel Ballroom | END OF CONVENTION |

# THE 76th ANNUAL MEETING

## GRAND RAPIDS — 1941

*Aerial View of Grand Rapids, Host City to the 1941 Convention of the Michigan State Medical Society to be held September 16, 17, 18, 19.*

### OFFICIAL CALL

The Michigan State Medical Society will convene in Annual Session in Grand Rapids, Michigan, on September 16, 17, 18, 19, 1941. The provisions of the Constitution and By-laws and the Official Program will govern the deliberations.

P. R. URMSTON, M.D., *President*
A. S. BRUNK, M.D., *Chairman of The Council*
O. D. STRYKER, M.D., *Speaker*
Attest: L. FERNALD FOSTER, M.D., *Secretary*

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## SESSIONS OF THE HOUSE OF DELEGATES

### TUESDAY, SEPTEMBER 16, 1941

Pantlind Hotel, Grand Rapids

8:00 a.m. Delegates' Breakfast, Swiss Room
9:00 a.m. First Session, Ball Room
3:00 p.m. Second Session, Ball Room
5:15 p.m. Special Pre-view of Exhibits
8:00 p.m. Third Session, Ball Room

## HOUSE OF DELEGATES, 1941

Ball Room, Pantlind Hotel, Grand Rapids
Order of Business*

### TUESDAY, SEPTEMBER 16, 1941

8:00 a.m. Sharp—Delegates' Breakfast, Swiss Room
9:00 a.m. Sharp—First Session, Ball Room

1. Call to order by the Speaker
2. Report of Committee on Credentials
3. Roll Call
4. Appointment of Reference Committees:
   - On Officers' Reports
   - On Reports of The Council
   - On Reports of Standing Committees
   - On Reports of Special Committees
   - On Amendments to Constitution and By-laws
   - On Resolutions

*See the Constitution, Article IV, and the By-laws, Chapter 3, on the "House of Delegates."

5. Speaker's Address—O. D. Stryker, M.D., Fremont
6. President's Address—P. R. Urmston, M.D., Bay City
7. President-Elect's Address—Henry R. Carstens, M.D., Detroit
8. Annual Report of The Council—A. S. Brunk, M.D., Detroit, Chairman
9. Report of Delegates to American Medical Association—Henry A. Luce, M.D., Detroit, Chairman
10. Resolutions**
11. Reports of Standing Committees:
    (a) Legislative Committee
    (b) Committee on Distribution of Medical Care
    (c) Medical-Legal Committee
    (d) Representatives to Joint Committee on Health Education
    (e) Preventive Medicine Committee
        Cancer
        Maternal Health
        Syphilis Control
        Tuberculosis Control
        Industrial Health
        Mental Hygiene
        Child Welfare
        Iodized Salt
        Heart and Degenerative Diseases
12. Reports of Special Committees:
    (a) Committee on Nurses' Training Schools
    (b) Conference Committee on Pre-Licensure Medical Education
    (c) Radio Committee
    (d) Advisory Committee to Woman's Auxiliary
    (e) Scientific Work Committee
    (f) Medical Preparedness Committee

Recess

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## TUESDAY, SEPTEMBER 16, 1941

### 3:00 p.m. Sharp—Second Session—Ball Room

1. Supplementary Report of Committee on Credentials
2. Roll Call
3. Unfinished Business
4. New Business**
5. Reports of Reference Committees:
   (a) On Officers' Reports
   (b) On Reports of The Council
   (c) On Reports of Standing Committees
   (d) On Reports of Special Committees
   (e) On Amendments to Constitution and By-laws
   (f) On Resolutions

5:15 to 6:30 p.m.—RECESS FOR SPECIAL PREVIEW OF EXHIBITS

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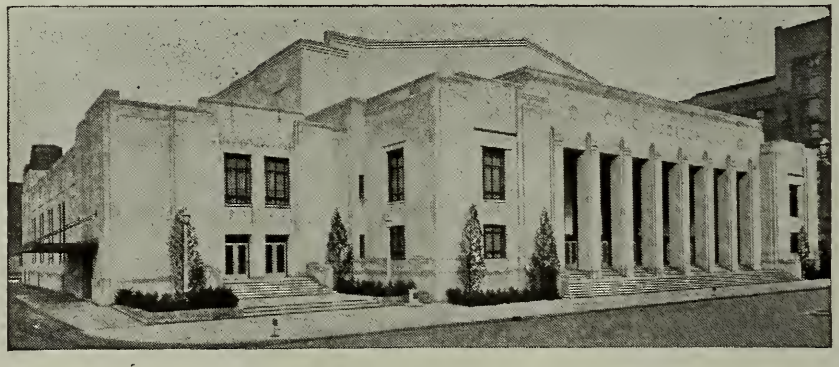
## TUESDAY, SEPTEMBER 16, 1941

### 8:00 p.m. Sharp—Third Session, Ball Room

1. Supplementary Report of Committee on Credentials
2. Roll Call
3. Supplementary Report from The Council
4. Supplementary Reports from Reference Committees
5. Elections:
   (a) Councilors:
       1st District—C. E. Umphrey, M.D., Detroit—incumbent
       4th District—R. J. Hubbell, M.D., Kalamazoo—incumbent
       5th District—Vernor M. Moore, M.D., Grand Rapids—incumbent
       6th District—Ray S. Morrish, M.D., Flint—incumbent
   (b) Delegate to American Medical Association:
       L. G. Christian, M.D., Lansing—incumbent
       Alternate Delegates to American Medical Association:
       George J. Curry, M.D., Flint—incumbent
       Ralph H. Pino, M.D., Detroit—incumbent
   (c) President-elect
   (d) Speaker of House of Delegates
   (e) Vice Speaker of House of Delegates

Adjournment

**All resolutions, special reports, and new business shall be presented in duplicate. (By-laws, Chapter 3, Section 7-n.)



**Civic Auditorium, Grand Rapids**

All activities of the 76th M.S.M.S. Convention—110 Technical and Scientific Exhibits and all Scientific Sessions—will be held in this spacious, modern auditorium, September 16, 17, 18, 19, 1941.

# YOU AND YOUR BUSINESS

## ANNUAL REPORT OF LEGISLATIVE COMMITTEE, 1940-41

In connection with the meeting of Michigan's Legislature, your Legislative Committee held five meetings during the past year: on October 24 and November 13, 1940; February 13, March 20 and April 24, 1941.

### Fifty-one Bills Affected Medical Practice

The 61st Michigan Legislature convened on January 1 and adjourned on May 27, 1941, leaving behind a good record so far as legislation affecting the medical profession is concerned. The Legislature was extremely slow in getting under way but more than compensated for its tardy start by the super-accerelation of the final weeks. During the session 1,058 bills were introduced of which 51 dealt directly with the practice of medicine. A number of important resolutions was also considered. These 51 medical bills and the resolutions were carefully studied and necessary contacts made either for or against, as circumstances demanded. Of these 51 bills, 13 passed the Legislature; an additional five passed one house but died in the other branch; and the balance were either killed on the floor or died in committee.

*No bill objectionable to the medical profession was passed at this session, although a score of inimical measures was introduced!*

### Thanks

The hundreds of alert physicians back home—our key-men—who constantly kept their friends in the Senate and House informed concerning medical legislation are mainly responsible for this good record. The legislators looked to their local medical friends for advice; they appreciated the opportunity to be of service. So again, the Legislative Committee expresses its thanks to every doctor who contacted his legislator during the past five active months. Without this wonderful help and coöperation the legislative program of the Michigan State Medical Society would not have been successful.

The Committee also is sincerely grateful to the far-sighted Council of the Michigan State Medical Society for its constant encouragement of the Legislative Committee in its nerve-wracking job.

The Legislative Committee again expresses appreciation and gratitude to the intelligent and health-minded members of the Michigan Legislature for the courteous reception they extended the representatives of the medical profession and the thoughtful consideration they gave to medical and health measures coming before them.

To his Excellency, Governor Murray D. Van Wagoner, the Legislative Committee reiterates its thanks for the friendly coöperation his office extended to the medical profession in all health matters.

Below are listed the 51 bills which vitally affected the medical profession. A brief description of the proposals together with the action taken is presented.

### Bills Passed by the Legislature

HB-215—To permit free choice of physician by welfare clients, by removing exemption of city physician and city pharmacist's offices in Detroit. Passed with amendment to permit the welfare client to choose either his private physician or the city physician's office. Signed by the Governor (P.A. 343).

HB-84—Deficiency appropriation for afflicted and crippled children totaling $435,452.13, of which $115,632.51 was payable to doctors of medicine, was passed and signed by the Governor (P.A. 14).

HB-483—Deficiency appropriation of $200,000 ($60,000 for afflicted and $140,000 for crippled) for afflicted and crippled children services to June 30, 1941, was passed and signed by the Governor (P.A. 110).

HB-402—Appropriating $1,802,295 for medical and hospital services of afflicted and crippled children for the fiscal year ending June 30, 1942, and $1,821,450 for the following year, was passed and signed by the Governor (HEA 215).

HB-129—To regulate the sale of prophylactic devices for the prevention of venereal diseases. Passed and signed by the Governor (P.A. 276).

HB-565—To provide for half payment by the state of costs of hospitalization of afflicted adults. Passed and presented to the Governor for approval (HEA 196).

HB-341—To give county and district boards of health the same powers now given by law to township and county boards of health, was passed and signed by the Governor (P.A. 198).

SB-400—To permit a board of governors for Wayne University, Detroit. Passed and presented to the Governor for approval (P.A. 248).

SB-71—Requiring payment of fees to persons ordered to take a physical examination by any court, board, etc., passed and signed by the Governor (P.A. 18).

SB-81—To establish a crime detection laboratory in the State Health Department, for the use of the Michigan State Police, was passed and signed by the Governor (P.A. 62).

SB-218—To amend the mental defectives sterilization act to make the law applicable to additional state institutions, passed and signed by the Governor (P.A. 109).

SB-248—To license operators of water treatment plants. This bill sponsored by the water treatment plants operator's association, was approved by the MSMS. Passed and presented to the Governor for approval (P.A. 239).

SB-134—To regulate sale and possession of valerium, passed and signed by the Governor (P.A. 140).

### Bills Approved by One House

SB-250—To provide for Afflicted-Crippled Children Commission. This bill (same as HB-317) was developed after a year's work by committees of the State Medical Society working in coöperation with representatives of the American Legion, Veterans of Foreign Wars, the Michigan Welfare League, the Michigan Hospital Association, the Forty and Eight, the Children's Fund of Michigan, and the Michigan Society for Crippled Children, and seemed to meet the requirements to end the confusion of the three-headed administration now existing. The bill passed the Senate by a good majority without damaging amendment, but failed to be reported out of the House Social Aid and Welfare Committee.

The afflicted-crippled children bill was added as an amendment to HB-402, passed the Senate, but was refused by the House as "not germane" to this appropriation bill.

The bill was finally attached to HB-565 as an amendment, passed the Senate, but the House refused to concur in the Senate Amendment. The model afflicted-crippled child proposal died in conference committee 5:30 a.m. the last morning of the session.

HB-131—To regulate the sale of barbituric acid and

its derivatives, sulfanilamide and its derivatives, and other so-called "Knock-out" drugs. After a stormy battle, this bill finally passed the house with objectionable osteopathic and "bookkeeping" amendments; the Senate removed the House amendments but made other changes in the bill which were not agreeable to the House. The bill died in conference committee.

SB-66—To raise medical compensation for occupational diseases and eliminate specific enumeration of "occupational diseases." Passed by Senate with many amendments, but died in House Labor Committee.

HB-217—To require "settlement" of pauper before rendition of surgery or treatment of afflicted adults at public expense. Passed House, but died in Senate.

HB-517—To authorize detention of adult voluntary applicants as full pay patients by state mental institutions; and to permit 35 to 60-day observation and treatment periods for suspected mental cases. Passed House, but died in Senate Public Health Committee.

### Bills Which Died in House of Origin

SB-95—To permit osteopaths to participate in group medical care plans. Killed in Senate Insurance Committee.

HB-110—To establish enabling act for group osteopathic care. Died in House Insurance Committee.

HB-209—To repeal the Basic Science Law. Died in House Public Health Committee.

HB-119—To set maximum fee of $3 for medical examination of persons obtaining marriage license. Died in House Public Health Committee.

SB-201—To authorize examination and copying of medical records, x-ray plates, charts, etc., of sick or injured persons by attorney of patient. Killed in Senate Judiciary Committee.

HB-190—To establish a "board of examiners in naturopathy." Died in the House Public Health Committee.

HB-333—To amend 1939 Welfare Law to prohibit county medical societies from making contracts with county welfare boards for medical relief; to establish uniform medical rates; to open all hospitals to osteopaths. Died in House Social Aid and Welfare Committee.

HB-117—To include as an occupational disease any disease contracted by any employe or person engaged in public health work. Died in House Labor Committee.

HB-72—To add baker's asthma to list of occupational diseases. Died in House Labor Committee.

HB-165—To amend many sections of the workmen's compensation law, including that portion concerning occupational diseases. Died in House Labor Committee.

SB-205 and SB-206—To amend the occupational disease law. Died in Senate Labor Committee.

HB-522 and HB-523—To amend the occupational disease law. Died in House Labor Committee.

HB-552—To amend the occupational disease law. Died in House Labor Committee.

SB-121—To prohibit employment of minors under 16 years without certificate of physical fitness to be given by public health officer or school physician. Died in Senate Labor Committee.

SB-122—To prohibit employment of girls under 18 and boys under 14 in street trades without certificate of physical fitness to be given by public health officer or school physician. Died in Senate Labor Committee.

SB-89—To place administration of afflicted child care with state and county social welfare departments. Died in Senate Welfare and Relief Committee.

HB-317—(Same as SB-250, see comment elsewhere) To establish an afflicted-crippled children commission. Died in House Social Aid and Welfare Committee.

HB-297—To provide for administration of afflicted-crippled children program. Sponsored by probate judges Died in House Social Aid-Welfare Committee.

SB-336—To provide an entirely new welfare law and combining the administration of the social welfare department and the afflicted and crippled children program. Died in Senate Welfare and Relief Committee.

SB-79—To penalize superintendent or executive in charge of hospital for failing to render first-aid to accident victims. Died in Senate Judiciary Committee.

SB-88—To abolish office of coroner (except in Wayne County) and establish state and county medical examiners. Died in Senate State Affairs Committee.

SB-101—To define qualifications of coroners in counties having 100,000 and not more than 250,000 population. Died in Senate State Affairs Committee.

SB-10—To void claims made upon county which are not acted upon by the county supervisors or county board of auditors within 90 days after receipt of same. Died in Senate Municipalities Committee.

HB-233—To amend welfare law of 1939 to provide half payment by the state for hospitalization of afflicted adults. Killed in House and reintroduced as HB-565, which passed.

SB-426—To increase number of persons on State Council of Health, plus other amendments to act governing state health department. Died in Senate Public Health Committee.

HB-580—To establish a cancer bureau in the state health department. Died in House Public Health Committee, which split on inclusion of damaging amendments urged by osteopathic lobby.

SB-335—To provide state aid to county health units, to be limited to $3,000 each. Killed by the Senate.

SB-366—To establish ragweed and mosquito extermination study commission. Killed by the Senate.

SB-382—To provide for uniform food, drug and cosmetic act to conform with federal act. Died in Senate Public Health Committee.

SB-272—To revise pharmacy practice act. Died in Senate Public Health Committee.

SB-275—To amend the narcotic drug act. Died in Senate Public Health Committee.

HB-342—To create a State Council of Health which would appoint the State Health Commissioner. Died in House Public Health Committee. This proposal was approved by the Michigan State Medical Society which desired that the State Department of Health be divorced from politics. However, legislators felt the time was not ripe for passage of such a bill. Similar legislation may be more favorably considered at a future session.

### Three Important Resolutions

House Resolution No. 48—To demand an investigation of contracts between county medical societies and county social welfare departments for medical care of those on welfare, introduced by the osteopathic representative in an effort to discredit the medical profession and its care of those on medical relief, was killed on the floor of the House.

House Concurrent Resolution No. 42—To request deferment of medical, dental, engineering and other professional students from the draft, was adopted by the Legislature.

Senate Concurrent Resolution No. 45—To request aid in providing financial and other aid for the training of nurses, was adopted by the Legislature.

### Recommendations

1. Your Legislative Committee respectfully stresses the need for frequent and close contact with each legislator (and other state and county office holders) by their medical constituents, and reciprocity with our legislator-friends in their capacities as professional and business men. Contacts with public office holders are the definite responsibility of the *individual* doctor. The most valu-

able contact is made by the physician who knows or renders professional service to the official.

We recommend that county medical societies give tangible expression of appreciation to the Senators and Representatives who proved themselves to be friends of Medicine. These legislators should be shown, by resolution or some other expression of thanks, that the medical profession is grateful for their friendly co-operation.

2. Concerning afflicted-crippled child legislation: Your Legislative Committee worked unceasingly to the final hour of the session for the passage of a uniform afflicted-crippled child bill. However, certain influences throughout the state made impossible the passage of this model legislation. Therefore, the medical profession must work (for two more years, at least) under the present crippled child and afflicted child laws which leave much to be desired. Your Legislative Committee recommends, however, that physicians continue to give primary consideration to the sick child and to render proper care and treatment to these unfortunate crippled and afflicted adolescents, despite the weaknesses of the present laws. Further, that the profession aid in the establishment and maintenance of medical examination boards or filters to help control the patient-intake. Finally, that each doctor work diligently during the next eighteen months to inform his patients and the public concerning the vital need for improved legislation covering Michigan's crippled and afflicted children.

3. Your committee reiterates its recommendation that the State Board of Registration in Medicine be urged to seek necessary changes in the Medical Practice Act, especially with reference to qualifications of Board members, at the next session of the Legislature as one of the Board's major activities.

4. We recommend that Michigan physicians understand the provisions and the dangerous import of the Wagner Bill, the Brown-Wagner-George Hospital Construction Bill, and other such legislation introduced into the United States Congress. The Committee feels that the American Medical Association should be congratulated on the inauguration of its legislative bulletin which keeps state societies well informed on Federal legislation to the end that the medical profession is able to maintain eternal vigilance.

5. We recommend an active and financial interest by the individual physician in other organizations and committees which are seeking the same results as are desired by the doctor of medicine. Support should be given by the practitioner of medicine not only to his county, state and national medical organizations, but to fully accredited committees or leagues created to uphold our constitutional form of government.

* * *

Your Legislative Committee has spared neither time nor effort in the State Society's legislative work. We believe we have gained further respect for the Michigan State Medical Society from legislators, elected officers of the state, the press, and the general public. The position of the State Society has been maintained and *strengthened.*

Again, to all the hundreds who have responded to our many requests for assistance, we thank you heartily.

Respectfully submitted,

HAROLD A. MILLER, M.D., *Chairman*
A. S. BRUNK, M.D.
HENRY R. CARSTENS, M.D.
H. H. CUMMINGS, M.D.
L. A. DROLETT, M.D.
T. K. GRUBER, M.D.
S. L. LOUPEE, M.D.
G. L. McCLELLAN, M.D.
H. L. MORRIS, M.D.
E. W. SCHNOOR, M.D.

**DEFERMENT OF MEDICAL STUDENTS**

A resolution (H.C.R. No. 42), relative to the deferment of certain draftees by selective service Boards, was adopted by the Michigan Legislature May 16, 1941:

"Whereas, It has come to the attention of the Legislature that many young men who have not yet completed their college work are being compelled to give up their studies and join the army; and

"Whereas, Many of these young men are not being given any deferment by their Selective Service Boards; and

"Whereas, A number of these students are taking special medical, mechanical and engineering courses that would tend to make them more valuable to the various medical and engineering units of the army; therefore be it

"Resolved, by the House of Representatives (the Senate concurring), That Louis B. Hershey, Acting National Director and Colonel E. M. Rosecrans, State Director of Selective Service, be and are hereby requested to give additional consideration to occupational deferments and to allow students in these specialized courses to finish their work; and be it further

"Resolved, That a copy of this resolution be forwarded to Louis B. Hershey, Col. E. M. Rosecrans, Governor Murray D. Van Wagoner, and United States Senators Arthur Vandenberg and Prentiss Brown."

---

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## WILL THERE BE ANY POLIOMYELITIS IN MICHIGAN THIS YEAR?

By S. D. Kramer, M.D.

The epidemic occurrence of poliomyelitis has proved too uncertain as regards severity and location to make any prediction possible. However, it has been repeatedly observed that although it is common for sporadic cases to recur in consecutive years in communities visited by an outbreak, it is uncommon for an outbreak of epidemic proportions to recur in the same community. On the other hand, it is not uncommon for adjacent communities, which had been spared in the previous year, to be visited by an outbreak of epidemic proportions during the following year or two. Applying such notion to Michigan it might safely be assumed that those communities of the upper peninsula which last year experienced what must be regarded as severe outbreaks, may have cases of the disease but will not be attacked in epidemic proportions. Whether the disease will appear in adjacent communities in epidemic proportions cannot, in the light of past experience, be answered with any degree of exactness.

The extraordinary drain upon the patience and fortitude of physicians and health authorities which is so regularly associated with this disease must be still fresh in the minds of the medical fraternity of the upper peninsula, and doubtless this concern will serve to keep them on the alert for any recurrence of cases this year.

It might perhaps be in point to attempt to bring up to date the results of recent studies in so far as such results may apply practically to the management of future outbreaks of the disease. Practicing physicians and organized health authorities naturally are interested in new development relating to (1) control of the disease; (2) preventive measures; and (3) methods of treatment, both general and specific.

### Control of the Disease

The problem of control remains a difficult one. The mode of the spread of the virus of poliomyelitis is still too obscure and too difficult to trace for one to offer any but very general rules of conduct during an outbreak. Nevertheless, recent studies have yielded some information of practical value. Vaughan and his collaborators of the Detroit Department of Health have reaffirmed "contact" as one possible method of spread. My own recovery of the virus from fecal material of healthy contacts and the recovery of the virus by Paul and Trask from the sewage system of areas in close proximity to outbreaks, suggest other possible modes of spread. Furthermore, my recovery of the virus from infected fecal material that had been kept at ice-box temperature for over six months indicates an extraordinary resistance of the virus to certain physical factors

Although it is readily conceded that a consideration of the above findings may not constitute complete nor even adequate control, it would seem indicated that these findings, which suggest the need for isolation, quarantine, avoidance of contact with cases, and the proper disposal of oral and fecal material from patients, should be applied by individual practitioners to local home problems and included in the general health procedures by health authorities.

### Prophylaxis

There is no specific prophylactic measure available for the prevention of this disease. The term prophylaxis might better be applied to the prevention and amelioration of the crippling after-effects of the disease. In this connection emphasis must be placed on early diagnosis, early splinting, and prolonged rest of the affected parts.

It is not the purpose of this brief discussion of the disease to enumerate the symptoms and laboratory findings upon which a diagnosis of poliomyelitis may be made, except to point out that in addition to the clinical and laboratory findings, a consideration of certain epidemic features of the disease might prove a useful guide in arriving at an early diagnosis. A knowledge of the seasonal occurence of the disease may prevent a "missed" diagnosis. Although the season at which the disease occurs may vary geographically, it is usually quite constant for any individual locality. In Michigan poliomyelitis usually makes its first appearance in June. A sharp increase in the number and concentration of cases during July generally presages an outbreak. The peak of reported cases usually is reached in August or early September, from which point on there is a wane in the curve with sharp reduction or disappearance of cases in October and November. The age distribution of the disease should be kept in mind. Although poliomyelitis may, and does, attack all age groups, it remains predominantly a disease of childhood.

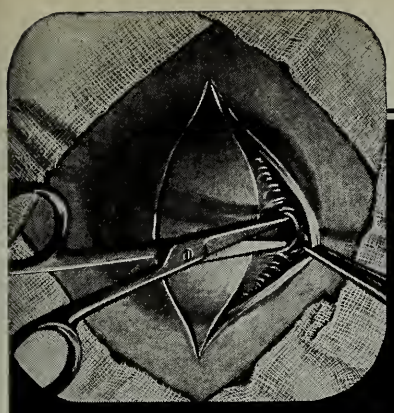
Special mention might be made perhaps of the importance of certain physical findings in the diagnosing of special forms of the disease. The rapidly fatal bulbar forms of the disease and intercostal paralysis must be diagnosed early if proper and adequate treatments are to be effectively employed. Marked toxemia, some difficulty in deglutition or aphonia, generally indicate a bulbar form of the disease, whereas, a shallow respiration associated with bilateral deltoid paralysis may indicate early intercostal involvement. Such patients are acutely ill and account for a large proportion of the fatalities; consequently early diagnosis is of particular and lifesaving importance.

### Treatment

There is no specific form of therapy for this disease. As already stated it is not the purpose of this discussion to give the details of treatment for the patient with poliomyelitis, except to point out certain important measures that are necessary when dealing with bulbar and intercostal forms of the disease.

As mentioned earlier, patients suffering from bulbar forms of poliomyelitis must all be considered acutely ill and prognosis in these cases should always be guarded. Such patients should be promptly hospitalized. One of the most common complications in bulbar poliomyelitis is involvment of the muscles of deglutition. When this involvement is extensive these patients literally choke to death because of their inability to care for their own mucus and saliva. This difficulty clearly points to the first steps to be taken in the treatment, namely, to withhold all food by mouth, liquid or solid, and to make every effort to keep the posterior pharynx free of accumulated mucus. This is most easily accomplished by postural drainage, the patient being placed in a prone position with the head hanging over the side of the bed. The application of gentle suction accomplishes the same purpose, but care must be employed not to traumatize the mucous membrane by careless or injudicious use of the suction tube. *Constant bedside care by an intelligent nurse is imperative.* Fluids and some degree of nutrition may be maintained

*(Continued on Page 552)*



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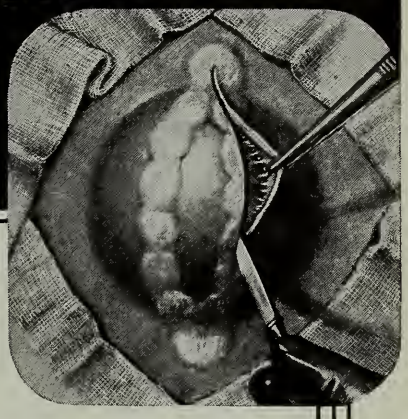

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*(Continued from Page 550)*

by the administration of 5 per cent glucose in saline by intravenous drip or hypodermoclysis. Fluids or food by mouth must be withheld until the patient has demonstrated his ability to swallow.

*The respiratory difficulty associated with bulbar forms of the disease must be carefully distinguished from the respiratory difficulties due to intercostal paralysis.* Patients with bulbar poliomyelitis do not do well in the respirator and it may even prove dangerous by compelling a patient whose throat is full of mucus, to aspirate such infected material into his trachæ and bronchi.

One of the most common causes for disappointment in the use of the respirator is the failure to diagnose intercostal paralysis sufficiently early. When paralysis of these muscles is extensive and breathing is maintained by the diaphragm and the accessory muscles, respiration cannot long be maintained and death follows. The intercostal muscles, of course, may be involved only partially and adequate ventilation may be maintained by the intact muscles for varying periods of time, but the course of the disease is too unpredictable to assume that paralysis will not be progressive. When the diagnosis of intercostal paralysis is made, and this should be done early, the patient should be removed to a hospital where a respirator will be available if needed.

Intercostal paralysis may be suspected by the type of respiration assumed by the patient in the early stages of the involvement. The patient may be said to spare his breath by talking very little or not at all, remaining quietly awake for long intervals of time. Intercostal involvement is to be suspected particularly when such "quiet wakefulness" is associated with unilateral or bilateral deltoid paralysis. When properly used and in time, the respirator is unquestionably a lifesaving mechanism, but its use must not be delayed until the patient has progressed to the point of exhaustion.

Treatment of paralysis of the voluntary skeletal muscles may be summarized by the dictum of "early splinting and prolonged rest." The importance of this dictum cannot be over-emphasized and there is a complete agreement in this among orthopedic surgeons. It has been my unfortunate experience to observe extremities permanently crippled by injudicious massage and manipulation by well meaning individuals who were ignorant of the underlying physiology. The problem of splinting has been largely solved by the National Foundation for Infantile Paralysis, Inc., which maintains a splint service without cost to the patient. The splints may be obtained upon request by any responsible person in the medical profession or by the local county chapter officer of the Foundation.

## ROCKY MOUNTAIN SPOTTED FEVER

The Maryland State Department of Health recently reported five cases of Rocky Mountain spotted fever or tick fever from widely separated parts of Maryland during the month of May. There were two deaths from the disease.

Tick fever occurs sporadically west of the Rocky Mountain states and while there have been no proven cases in Michigan, it may occur in this state. All physicians should bear this disease in mind when making a differential diagnosis of a rash in a severely ill individual which in its early stages simulates most closely influenza, meningitis, measles, typhoid and typhus fevers. This disease, caused by a Rickettsial organism, is one of a number of related diseases of which typhus fever is the most common. The Dermacentor ticks are responsible for Rocky Mountain spotted fever and in the central and east portions of the United States the vector chiefly responsible for its spread is the American dog tick which fastens itself to horses, dogs and cattle

primarily and accidentally to human beings. The disease is contracted through the bite of the infected insects or by crushing the tick on the skin and absorbing the virus through a scratch, open cut or break in the skin. It does not spread from person to person.

The incubation period varies between two and ten days and the onset resembles influenza, followed by an eruption which is first macular and then petechial and covers the face, trunk, extremities and very commonly the mucosa of the mouth and pharynx. The rash may be discrete but tends to coalesce and ranges from a bright red to a brownish copper cast and may go on to gangrene of the skin due to thrombi of the peripheral vessels. The Weil-Felix reaction, while not always positive, is a valuable aid in the diagnosis of this disease. A series of three blood samples should be taken in each case, the first as soon as the disease is suspected, the second approximately on the 12th day of the disease and the third during early convalescence. Increasing titre of agglutinins constitutes a positive test.

In sporadic cases, such as may occur in Michigan, it may be very difficult to differentiate typhus fever from tick fever. However, in the former disease the rash does not occur on the palms of the hands and soles of the feet nor on the face or head and fades with pressure, the Weil-Felix test will usually differentiate the disease, there is usually no sloughing of dependent parts of the body such as the scrotum or buttocks and fever declines by crisis or rapid lysis.

When removing a tick from a patient, care should be taken not to crush the insect and if it is deeply embedded, small forceps may dislodge it or a drop of oil may be of help in withdrawing ticks followed by an application of iodine to the wound.

Prophylaxis is by means of personal care in tick-infested areas and the use of vaccine. Inasmuch as the incidence of this disease is low in this area, it is not wise to do wholesale vaccination of the population but to depend upon personal hygiene with frequent inspection of the body for ticks especially when the individual is employed in a tick-infested area, or when picnicking or camping.

---

## 100,000 KAHNS A MONTH!

Kahn tests now being done in Michigan public and private laboratories are crowding the 100,000 mark in monthly totals. April tests totaled 98,949, an all-time high record. Previous highs were 89,002 in March, 1941, and 85,782 in October, 1940.

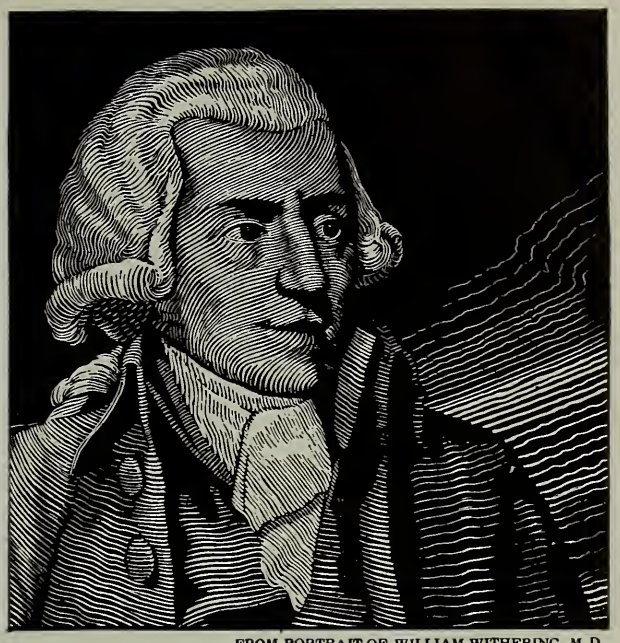
**The April total of 98,949 Kahn tests was divided as follows: state laboratories 42,968 (a record), city health department laboratories aided by state 21,560 (a record), private registered laboratories 34,421 (second highest total).**

Selective Service examinations are contributing heavily to the blood tests for syphilis being done in the Department laboratories. Tests done for draft board physicians often ran 1,000 a day in April. Kahn tests for Selective Service in the first four months were: January 12,405, February 11,407, March 17,933, April 19,749, May 20,585.

---

## NOT ENOUGH PUBLIC HEALTH NURSES

In Michigan, there are 976 public health nurses or one nurse to 5,385 persons in the state's population, according to a recent survey of the Department. The accepted ratio for effective and adequate public health work is one nurse for 2,000 persons. Half the public health nurses of Michigan are in Detroit. The ratio there is one nurse to 3,326 persons; outstate it is one nurse to 7,443 persons.

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# Woman's Auxiliary

### Bay County

The Woman's Auxiliary to the Bay County Medical Society wound up its affairs for this spring by giving a complimentary tea for guests from Saginaw, Midland, and other nearby communities at the Bay City Country Club on Tuesday, May 13, from 3 to 5 o'clock in the afternoon.

Between fifty and sixty guests attended the tea, the majority from Bay City. We were very happy to have Mrs. Roger V. Walker, state president, and Mrs. A. O. Brown, state secretary-treasurer, both of Detroit, with us.

Our president, Mrs. W. R. Ballard, and the two state officers formed the receiving line for the party. Mrs. Paul R. Urmston, Mrs. L. Fernald Foster, Mrs. Colin A. Stewart, and Mrs. H. M. Gale were invited to preside at the tea table during the afternoon.

Mrs. George M. Brown was general chairman of the party, assisted by Mrs. R. E. Scrafford, Mrs. Kenneth Stuart, Mrs. A. D. Allen, and Mrs. D. J. Mosier.—Mrs. Paul L. DeWaele.

### Genesee County

The May meeting of Genesee Medical Society Auxiliary was held in the Federation Clubhouse. A board meeting preceded the regular luncheon meeting.

Stephen Gelenger, M.D., spoke on "Medical Defense Preparation." Henry Cook, M.D., Chairman of the Industrial Health Committee, MSMS, talked on "The Physician as an Industrialist."

A report on the ticket sale for the play, "Ladies of the Jury," to be presented by the Flint Community Players under sponsorship of the Auxiliary, was given. Proceeds from the play, which was very successful, were given to British War Relief.

The charity work engaged in throughout the year was discussed and plans were made to care for a doctor's widow during the summer. We have provided for this woman and her family for more than a year.

Our delegates to the convention of Woman's Auxiliary to the American Medical Association were Mrs. William Hubbard, Mrs. J. H. Curtin, Mrs. Gordon Willoughby, and Mrs. O. J. Preston.—(Mrs. N. A.) Margaret A. Gleason.

### Kalamazoo County

The annual meeting of the Woman's Auxiliary, Kalamazoo Academy of Medicine, was at the home of Mrs. W. G. Hoebeke on May 21. Mrs. James Malone was the assisting hostess.

A coöperative dinner was enjoyed by the twenty-one members present. The business meeting followed, and annual reports of all committee chairmen were given. The new officers elected for the coming year were: president, Mrs. Sherman Gregg; president-elect, Mrs. James Malone; vice president, Mrs. Roscoe Hildreth; secretary, Mrs. John Fopeano; treasurer, Mrs. Hugo Aach.

Plans for a picnic to be held June 11 at the summer home of Mrs. F. E. Grant, Gull Lake, were discussed.

The program for the meeting was furnished by Mrs. Florence Fiske, of the Kalamazoo Tuberculosis Association, who showed several very interesting films on the prevention and cure of tuberculosis.—Mrs. Gerald H. (Frances) Rigterink.


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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

*A complete technique of treatment and literature will be sent upon request*

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# ✶ COUNTY AND PERSONAL ACTIVITIES ✶

**100 Per Cent Club for 1941**

| | |
|---|---|
| Allegan | Manistee |
| Barry | Menominee |
| Clinton | Muskegon |
| Dickinson-Iron | Oceana |
| Eaton | Ontonagon |
| Grand Traverse-Leelanau-Benzie | Ottawa |
| Huron | Saginaw |
| Ingham | Saint Clair |
| Jackson | Saint Joseph |
| Lapeer | Sanilac |
| Lenawee | Shiawassee |
| Luce | Tuscola |
| | Wexford-Missaukee |

The above County Medical Societies have certified 1941 membership for all of their 1940 members. Several more societies are not on the 100 per cent roll because of only one delinquent member.

*Wm. A. Lange, M.D., Detroit,* addressed the meeting of the Dickinson-Iron County Medical Society at Iron Mountain on June 5 to which all doctors and dentists in the western half of the Upper Peninsula were invited. Doctor Lange gave a paper on "Reconstructive Surgery About the Face and Neck" which was illustrated with colored slides and motion pictures. Twenty-five guests in addition to fifteen members were present for the joint meeting.

*Red, White and Blue!* The June issue of the *Bulletin of the Calhoun County Medical Society* appeared with red and blue type on white paper giving an attractive patriotic note to this informative bulletin.

* * *

*Correction!* The name of Carl Hanna, M.D., formerly of Detroit, and now serving as Lt. Colonel in the 107th Medical Regiment at Camp Livingston, Louisiana, was inadvertently omitted from the Roster of members published in the May JOURNAL. Apologies!

* * *

*A record attendance of 243 medical golfers* played in the 26th Annual Tournament of the American Medical Golfing Association on June 2, 1941, over the Cleveland Country Club and Pepper Pike courses. The championship was won by George R. Love, M.D., of Oconomowoc, Wisconsin, with a low gross of 149 for the 36 holes. John M. Murphy, M.D., of Detroit, 1940 AMGA Champion, placed third with a gross of 152. G. T. McKean, M.D., of Detroit, won a prize in the championship flight.

Harry E. Mock, M.D., Chicago, was elected president; John B. Morgan, M.D., Cleveland, first vice president, and H. V. Hubbard, M.D., Plainfield, N. J., second vice president, of the AMGA for the coming year. Bill Burns was reappointed executive secretary. The next AMGA Tournament will be held in Atlantic City in June, 1942.


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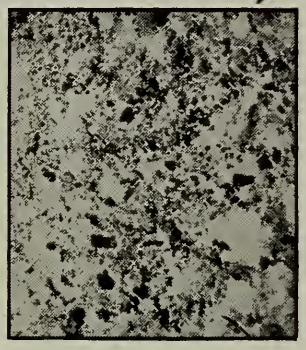

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If you have never examined Libby's Baby Foods, we would like very much to send you a sample can. As soon as you open it, you will notice how much smoother and finer textured Libby's are. Libby, McNeill & Libby, Chicago.

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*The twentieth annual scientific and clinical session* of the American Congress of Physical Therapy will be held September 1 to 5 inclusive, 1941, at the Mayflower, Washington, D. C. The mornings will be devoted to the annual instruction course and the afternoons and evenings will be devoted to the scientific and clinical sessions. The seminar and convention proper will be open to all physicians and qualified technicians. For information concerning the seminar and preliminary program of the convention proper, address the American Congress of Physical Therapy, 30 North Michigan Avenue, Chicago.

* * *

*Premarital Examinations:* Doctor, in questionable cases arising under this particular law, you have the privilege of contacting the State Health Commissioner as regards special certification for marriage.

The State Health Commissioner has availed himself of the MSMS Syphilis Control Committee in seeking advice towards the solution of questionable cases connected with special certification for marriage.

Similar problems of your patients will receive prompt and careful consideration.

* * *

*The Michigan Society of Anesthetists* was organized May 22, 1941, in Ann Arbor. Joseph DePree, M.D., of Grand Rapids, was elected president; Willis L. Dixon, M.D., Grand Rapids, first vice president; R. J. Himmelberger, M.D., Lansing, second vice president; and Joseph C. Tiffany, M.D., of Grand Rapids, secretary-treasurer.

Standing Committees on Education, Public Relations, and Legislation were appointed. A committee is now drawing up the Constitution and By-Laws.

Any anesthetists in Michigan who were not notified of this organization are asked to contact Dr. Tiffany, 420 Metz Building, Grand Rapids.

**DON'T FORGET YOUR GRAND RAPIDS CONVENTION, SEPTEMBER 16, 17, 18, 19, 1941**

In addition to the unusually attractive scientific program arranged for your enjoyment (see page 544 for names of the thirty nationally-known out-of-Michigan lecturers), a number of special events will feature the Grand Rapids Convention.

A Smoker, for MSMS members only, has been arranged for Thursday evening, September 18, 9:00 p.m., in the Ball Room of the Pantlind Hotel. Complimentary admission card will be sent to all members prior to the meeting.

Invitational Golf, at the beautiful Kent Country Club, will be the highlight of Monday, September 15. Tee off at 1:00 p.m. Dinner and presentation of prizes at the Club, 7:00 p.m.

Special entertainment for the wives of visiting physicians is being arranged by the Woman's Auxiliary.

Plan now to attend the 76th MSMS Convention. Combine a very pleasant vacation in Grand Rapids with the opportunity to hear the nation's outstanding medical men discuss the latest advances in medical science. Upwards of 2,000 physicians are expected to register so hotel reservations should be made immediately.

## Industry Warned of Rejected Draftees

Industry is facing a serious problem when it begins to carry on with older men and rejected draftees, Dr. Kenneth E. Markuson, director of the Bureau of Industrial Hygiene of the State Health Department, declared the other day.

Dr. Markuson spoke at the formal opening of the new medical building at Pontiac Motor Division. In his audience were 150 members of the Oakland County Medical Society.

"Your greatest problem will not be increased production, material shortages or strikes but the need for more and more manpower," Markuson told the Pontiac physicians. "Young men have been drafted and industry must fall back on older workers and the rejects of the Selective Service Act.

"In fairness to all, these new men should be given as stiff a physical examination as the Army gives. This should be made before employment because these men are defective and should be placed where their defects are not a menace.

"The Army is rejecting 40 per cent of the draftees and these men are going into industry.

"If they are not carefully examined there may be disastrous results."

Dr. C. D. Selby, medical consultant for General Motors, addressed Pontiac's guests and told of the great dependence of the plant physician on the outside practitioner.

To prove his point he cited General Motors figures for 187,000 hourly rated employes in 1940. These were 22,521 who were disabled during the year for periods in excess of seven days. Of these 1,395 were disabled from occupational causes and 18,935 because of ordinary non-occupational diseases or injuries, Dr. Selby said. *The ratio of days lost was one day for occupational disability to 300 days for non-occupational.*

Greatest source of time lost in 1940, Dr. Selby said, was appendicitis in which 2,197 cases lost 101,174 days. Influenza took 43,183 days and tonsillar infections 38,094 days.

### TALKS ON SYPHILIS CONTROL

Doctor, if you should be invited to speak before a county medical society or some other professional group, or before a lay audience, on "Syphilis Control," the Syphilis Control Committee of the Michigan State Medical Society invites you to utilize one of its sets of lantern slides.

One set of slides has been developed for use with professional groups, and another for lay presentation. Accompanying the set is a suggested outline for presentation in utilizing the slides furnished under the auspices of the Committee. These slides have been carefully organized and are easy to present.

Write the Executive Office, 2020 Olds Tower, Lansing, giving plenty of time for the slides to be shipped to you. Indicate the date of your presentation, the name of the organization and the exact location to which you wish the slides sent. There is no expense other than the cost of returning slides by express to Lansing.

*Civil Service examinations* for medical technicians, laboratory workers and nurses for hospitals and public health nursing, have been announced. Appointments are open for public health nursing consultant positions paying $2,600 and $3,200 a year. This examination is given only to registered graduate nurses who have completed a 4-year college course including or supplemented by at least 1 year of study in public health nursing, and who have had experience in public health nurs-

Formal opening of the new Medical Building at Pontiac Motor Division was featured by the visit of 150 members of the Oakland County Medical Society who toured the hospital and plant and dined as guests of the division. A few of the visiting doctors are shown here in the hospital admitting room.

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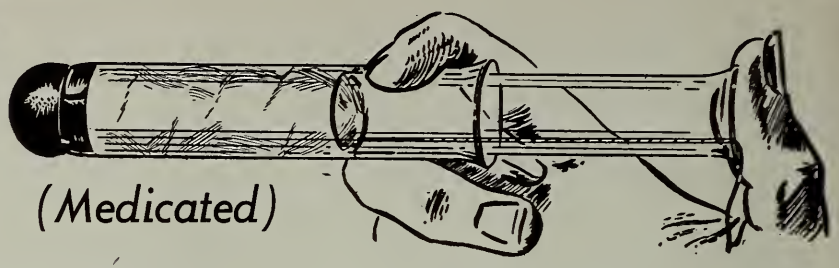

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ing supervision. Applications will not be accepted after July 26, 1941.

Applications will be accepted until further notice for positions as medical technician paying from $1,620 to $2,000 a year and as junior laboratory helper at $1,440. To meet the pressing need for nurses in the Veterans' Administration, Public Health Service and Indian Field Service, the Commission has just reannounced the examination for Junior Graduate Nurse at $1,620 a year. A written test is no longer required and the vision requirements have been modified. Applications will be rated as received until further notice. Persons who are interested in and qualified for any of these positions are urged to send their applications to the Commission's Washington office.

**WARNING!**

All physicians who are in military service are urged to *formally* cancel their narcotic licenses, both state and federal. Otherwise, their names will continue to be listed as active practitioners and failure to renew may bring unnecessary penalty. To be on the safe side, officially cancel your license for narcotics.

### Michigan Physicians on AMA Program

Michigan physicians on the program of the 1941 AMA Convention in Cleveland included the following: Frank H. Bethell, M.D., Ann Arbor, on "Lymphatic (Lymphogenous) Leukemia"; Howard C. Jackson, M. D., and Frederick A. Coller, M.D., Ann Arbor, on "The Use of Sulfanilamide in the Peritoneum"; Norman F. Miller, M.D., Ann Arbor, on "The Perpetuation of Error in Obstetrics and Gynecology"; A. C. Furstenberg, M.D., Ann Arbor, on "Diseases of the Salivary Glands"; M. R. Kinde, M.D., Battle Creek, on "Communicable Disease Control"; Russell N. DeJong, M.D., Ann Arbor, on "Vitamin E and Alpha-Tocopherol Therapy in Neuromuscular and Muscular Disorders"; Reed M. Nesbit, M.D., and Wm. G. Gordon, M.D. of Ann Arbor on "Surgical Treatment of the Autonomous Neurogenic Bladder"; Carlisle F. Schroeder, M.D., Detroit, on "Presacral (Superior Hypogastric) Neurectomy"; Wm. Bromme, M.D., Detroit, on "The Chemotherapy of Gonorrheal Urethritis"; "Charley J. Smyth, M.D., Richard H. Freyberg, M.D., and Isadore Lampe, M.D., Ann Arbor, on "Roentgen Therapy for Rhizomelic Spondylitis"; Louis J. Hirschman, M.D., Detroit, on "The Colostomy Question"; and C. C. Birkelo, M. D., Detroit, on "The Roentgen Diagnosis of the Primary Tuberculous Infection."

### Penberthy-Weller Exhibit on Burns Wins Silver Medal at Cleveland AMA

Grover C. Penberthy, M.D., and Charles N. Weller, M.D., Detroit, won the Silver Medal in the Scientific Exhibit of the American Medical Association at Cleveland. The exhibit illustrating the treatment of burns was judged on the basis of excellence of presentation and correlation of facts. Congratulations to Doctors Penberthy and Weller!

Other Michigan physicians who won honors in Cleveland with their excellent scientific exhibits were Henry N. Harkins, M.D., of Detroit, whose exhibit illustrated the treatment of burn shock and Frank W. Hartman, M.D., of Detroit for his exhibit on the development of a method for the desiccation of human blood plasma.

Also participating in the scientific exhibit were the following physicians from Michigan; George J. Curry, M.D., Flint; R. J. Noer, M.D., and James M. Win-



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field, M.D., of Detroit, demonstrating in the exhibit on fractures; Bernard A. Watson, M.D., Battle Creek on "Clinical Significance of Glycosuria and the Prevention of Diabetes"; Claire L. Straith, M.D., and Wayne B. Slaughter, M.D., Detroit; and E. Hoyt DeKleine, M.D., Buffalo, on "Plastic Surgery"; Roy D. McClure, M.D., and Conrad R. Lam, M.D., Detroit, on "Methods and Results in Heparin Administration"; and Lowell S. Selling, M.D., Detroit, on "Examination and Treatment of the Traffic Offender."

### Michigan's Delegates Honored

Henry A. Luce, M.D., Detroit, was named chairman of the important reference committee on Legislative and Public Relations of the AMA House of Delegates. L. G. Christian, M.D., Lansing, was made a member of the reference committee on Reports of the Officers. Frank E. Reeder, M.D., Flint, was appointed Sergeant at Arms.

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## SUPPLEMENTARY ROSTER

The following members were certified to the Secretary of the Michigan State Medical Society after the Roster which appeared in the May and June issues of THE JOURNAL had gone to press:

### Genesee

Bruce, W. W.....Flint
Kaleta, Edward.....Flint

### Gogebic

Eisele, D. C.....Ironwood
Reid, John D.....Ironwood

### Grand Traverse-Leelanau-Benzie

Van Leuven, B. H.....Traverse City

### Gratiot-Isabella-Clare

Carney, T. J.....Alma
Hersee, W. E.....Mt. Pleasant
Kilborn, H. F.....Ithaca
Miller, S. W.....Alma

### Livingston

McGregor, A. J.....Brighton

### Mecosta-Osceola-Lake

Peck, Louis.....Barryton
White, J. A.....Morley

### Oakland

Carr, W. H.....Holly
Christie, Edward.....Pontiac

### St. Joseph

O'Dell, John H.....Three Rivers
Shaw, G. D.....Mendon
Weir, D. C.....Three Rivers
Wilkerson, Nina C.....Sturgis

### Washtenaw

Adcock, John D.....Ann Arbor
Loder, Leonel Lewis.....Ann Arbor
Parsons, Robert J.....Ann Arbor
Simrall, James O. H.....Ann Arbor

### Wayne

Alderman, R. F.....Detroit
Babcock, L. K.....Detroit
Barnett, Louis L.....Detroit
Barone, Charles J.....Detroit
Bevington, Harry G.....Detroit
Bicknell, Nathan J.....Detroit
Blaine, Max.....Detroit
Bookmyer, Ralph H.....Detroit
Bookstein, Abraham M.....Detroit
Brachman, D. S.....Detroit
Brown, Gordon T.....Detroit
Bruehle, Richard A.....Detroit
Burnham, Frederick V.....Detroit
Burrows, Howard A.....Detroit


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| Burstein, Morris M. | Detroit |
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| Carlson, Harold W. | Detroit |
| Carlucci, Peter F. | Detroit |
| Carpenter, Glenn B. | Detroit |
| Collins, James B. | Detroit |
| Colvin, Leslie T. | Detroit |
| Crane, Langdon T. | Detroit |
| Curhan, Joseph H. | Detroit |
| Day, J. Claude | Detroit |
| DeJongh, Edwin | Detroit |
| Dillard, Malcolm | Detroit |
| Drinkaus, Harold | Detroit |
| Durham, Robert H. | Detroit |
| Eaton, Crosby D. | Detroit |
| Fallis, Lawrence S. | Detroit |
| Fenech, Harold B. | Detroit |
| Fisher, George S. | Detroit |
| Fogt, Robert G. | Detroit |
| Fogt, Herbert E. | Detroit |
| Fordell, F. S. | Detroit |
| Friedman, I. H. | Detroit |
| Galdonyi, Nicholas | Detroit |
| Gates, Nathaniel | Detroit |
| Gleason, John E. | Detroit |
| Gramley, Wm. | Detroit |
| Green, Ellis R. | Detroit |
| *Hanna, Carl | Camp Livingston, La. |
| Hartman, Frank W. | Detroit |
| Henderson, Leslie T. | Detroit |
| Hewitt, Robert S. | Dearborn |
| Horkins, Harold A. | Detroit |
| Hunt, Verne G. | Detroit |
| Isaacson, Arthur | Detroit |
| Johnson, Ralph K. | Detroit |
| Kane, Alex M. | Milwaukee |
| Kates, Simon C. | Detroit |
| Kleinman, S. | Detroit |
| Koven, Abraham | Detroit |
| Krebs, Wm. T. | Detroit |
| Krynicki, Francis X. | Detroit |
| Lance, Paul E. | Lapeer |
| Levin, Michael M. | Detroit |
| Martin, Isaiah H. | Detroit |
| McClelland, Carl C. | Detroit |
| Miller, Wm. E. | Detroit |
| Moloney, J. Clark | Detroit |
| Moroun, S. J. | Detroit |
| Mosee, W. Jones | Detroit |
| Nickels, Albert W. | Detroit |
| Noer, Rudolf J. | Detroit |
| Norton, Arthur B. | Detroit |
| O'Brien, G. M. | Detroit |
| Orecklin, L. | Detroit |
| Pearman, Chas. L. R. | Detroit |
| Petix, Samuel C. | Detroit |
| Rieden, James A. | Detroit |
| Rom, Jack | Detroit |
| Rosen, Robert | Detroit |
| Seeley, James B. | Dearborn |
| Seiferlein, Archibald L. | Detroit |
| Shebesta, Bessey H. | Detroit |
| Sparks, J. H. | Detroit |
| Steffes, Everett M. | Detroit |
| Steiner, Louis J. | Detroit |
| Swanson, Carl Wm. | Detroit |
| Townsend, Kyle E. | Detroit |
| Watson, Douglas J. | Detroit |
| Weaver, Delmar F. | Detroit |
| Wood, Wilfrod C. | Detroit |
| Wiechowski, Henry E. | Detroit |
| Zaik, Edward J. | Detroit |

*Military service.

## In Memoriam

**Earl S. Bullock** of Detroit, was born in Detroit in 1871 and was graduated from the Detroit College of Medicine and Surgery in 1893. He served his internship at Harper Hospital and then became associated with the late H. O. Walker, M.D. Doctor Bullock, who specialized in tuberculosis, had his own Sanatorium in Silver City, New Mexico, for a number of years. He returned to Detroit in 1926 and had been associated with the Shurly Hospital since that year. Doctor Bullock served his country overseas during the World War. He died on May 1, 1941.



*Say you saw it in the Journal of the Michigan State Medical Society*

# THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

PHYSICAL MEDICINE. The Employment of Physical Agents for Diagnosis and Therapy. By Frank H. Krusen, M.D., F.A.C.P., Associate Professor of Physical Medicine, the Mayo Foundation, University of Minnesota; Head of the Section on Physical Therapy, the Mayo Clinic; Member of the Council on Physical Therapy of the American Medical Association; Past President of the American Congress of Physical Therapy; Past President of The Academy of Physical Medicine. With 351 illustrations. Philadelphia and London: The W. B. Saunders Company, 1941. Price $10.00.

Krusen is presenting here a most complete, yet practical, compilation of physical therapy. After some general chapters on the history, technique and indications, he discusses in great detail with many informative illustrations the technique, indications and expectations for each of the forms of therapy used. The varying claims are carefully and conservatively evaluated providing a safe and efficient guide for the general practitioner.

* * *

A TEXTBOOK OF OPHTHALMOLOGY. By Sanford R. Gifford, M.A., M.D., F.A.C.S. Professor of Ophthalmology, Northwestern University Medical School, Chicago; Attending Ophthalmologist, Passavant Memorial and Cook County Hospitals. Illustrated. Second Edition, Revised. Philadelphia and London: W. B. Saunders Company, 1941. Price: $4.00.

While this is primarily a textbook it is sufficiently practical to be of decided value to the general practitioner. It is profusely illustrated and contains some beautiful colored photographs which are well selected. Its scope is broad and complete. The treatment is well described and detailed to aid the physician.

* * *

TEXTBOOK OF PEDIATRICS. By J. P. Crozer Griffith, MD., Ph.D., Emeritus Professor of Pediatrics in the University of Pennsylvania; Consulting Physician to the Children's Hospital, Philadelphia; Consulting Physician to St. Christopher's Hospital for Children; Consulting Pediatrist to the Woman's, the Jewish, and the Misericordia Hospitals, etc.; Corresponding Member of the Société de Pediatrie de Paris: and A. Graeme Mitchell, M.D., B. K. Rachford Professor of Pediatrics, College of Medicine, University of Cincinnati; Director of the Children's Hospital Research Foundation; Director of Pediatric and Contagious Services in the Cincinnati General Hospital. Third Edition Revised and Reset. Philadelphia and London: W. B. Saunders Company, 1941. Price: $10.00.

This is the third edition of a textbook originally published in 1933. It is encyclopedic in scope and principally a textbook or a reference book for the physician who seeks more information on a pediatric subject. It is not profusely illustrated but the illustrations are well chosen and explanatory. In the eight years since the first publication this book has achieved world-wide fame in its field. Griffith and Mitchell are assisted by an imposing group of the leading pediatricians and allied scientists of the continent. It is highly recommended as a reference book.

* * *

A MANUAL OF ALLERGY. For General Practitioners. By Milton B. Cohen, M.D., Director of The Asthma, Hay Fever and Allergy Foundation; Visiting Physician in Allergy, St. Alexis Hospital, Cleveland, Ohio. New York and London; Paul B. Hoeber, Inc., Medical Book Department of Harper and Brothers, 1941. Price: $2.00.

This is a pocket-sized volume of 156 pages in which the broader and more practical aspects of allergic manifestations are covered for the use of the general practitioner. While not neglecting a discussion of the


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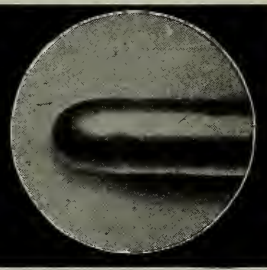

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theory of allergy, the pages are covered with usuable material. The chapter on the physical examinations is most interesting since the author discusses physical findings which may corroborate a history of allergy. One paragraph in his preface which is well worthy of consideration: "*** Specialties in medicine and specialists justify their existence only when they result in better care for the sick; further study by controlled research to expand the frontiers of knowledge; and better distribution of special knowledge to physicians not familiar with the principles and methods employed by workers in the specific fields.

"When judged by these standards, most medical specialties will be found to have made significant contributions to the care of the sick and to research, but *many have failed to hand down to the general practitioners the seasoned generalizations which should be part of every physician's knowledge.****"

* * *

BRUCELLOSIS (Undulant Fever) Clinical and Subclinical. By Harold J. Harris, M.D., Health Officer, Westport, N. Y.; Consulting Physician, St. Lawrence State Hospital; Attending Physician, Elizabethtown Community Hospital; Lieutenant Commander, Medical Corps, United States Naval Reserve; Member, New York Academy of Medicine; Associate Member, American College of Physicians. Foreword by Walter M. Simpson, M.D., F.A.C.P., Director, Kettering Institute for Medical Research, Miami Valley Hospital, Dayton, Ohio. With 12 colored and 44 black-and-white illustrations. New York and London: Paul B. Hoeber, Inc., Medical Book Department of Harper and Brothers, 1941. Price: $5.50.

Doctor Harris, while practicing medicine in a rural area of New York state, realized that he had failed to recognize brucellosis in the early years of his practice and became more and more stimulated to pursue studies in that field. This monograph is directed principally to the general practitioner whom he believes has the first opportunity to recognize this serious menace to public health. The clinical story of the disease is simply but completely presented, the laboratory aspect is properly evaluated and the prognosis and treatment well covered. It is beautifully illustrated and the typography is excellent. This book is recommended to the progressive general practitioner.

* * *

THE DOCTOR TAKES A HOLIDAY. An Autobiographical Fragment. By Mary McKibbin-Harper, M.D. A bookfellow Book. Cedar Rapids, Iowa: The Torch Press, 1941. Price: $2.50.

Dr. Mary McKibbin-Harper has written a number of travel books and in this account she describes her last trip to the Orient. Her love for adventure, her intimate acquaintances with the leading women physicians and her flair for paragraph analyses make it indeed interesting and cultural reading. Her debunking of some of the impressions the occasional reader has of the East is refreshing. Her description of the burial in Bombay and its comparison to our past and present burial customs is soul awakening. We can only hope that in the author's next book more use is made of the interesting line drawings which infrequently impress the reader more than word descriptions and less use is made of references to visits with other women doctors.

* * *

THE STORY OF CLINICAL PULMONARY TUBERCULOSIS. By Lawrason Brown, M.D., Late Director of Trudeau Sanatorium, Lecturer in Trudeau School of Tuberculosis; Baltimore: The Williams and Wilkins Company, 1941. Price: $2.75.

To the physician interested in pulmonary tuberculosis, and each physician should be, Lawrason Brown, one of the best known specialists in the field has offered an interesting, even thrilling history of the condition. After reading this book one gains a clearer insight into the superstitions and common beliefs held by a layman. This is a very readable book which will stimulate the medical mind.

DIETETICS FOR THE CLINICIAN. By Late Milton Arlanden Bridges, B.S., M.D., F.A.C.P., Director of Medicine, Detention, Rikers Island and West Side Hospitals, New York; Consulting Physician, Seaview Hospital, Staten Island, New York; and Department of Education, New York University, New York; Assistant Professor of Clinical Medicine and Lecturer in Therapeutics and Nutrition, New York Post-Graduate Medical School of Columbia University; Associate Attending Physician and Chief of Diagnostic Clinic, Post-Graduate Hospital, New York; Fellow of the New York Academy of Medicine. Fourth edition thoroughly revised. Philadelphia: Lea and Febiger, 1941. Price: $10.00.

This is a posthumous book by one of the country's leading clinicians who devoted most of his life to the study of the influence of food and disease. The subject is exceptionally well covered and in its particular field is encyclopedic. The major part of the volume is devoted to the types of diet most suitable for various factors of diseases and extensive tables of contents of various foods are included. These tables are exceptionally complete and practically organized. The book is recommended for any general practitioner.

* * *

MACLEOD'S PHYSIOLOGY IN MODERN MEDICINE. Edited by Philip Bard, Professor of Physiology, Johns Hopkins University, School of Medicine, in collaboration with nine authors. Ninth Edition. St. Louis: The C. V. Mosby Company, 1941. Price: $10.00.

This book was originally published in 1918 by Professor Macleod and received world renown as an authoritative textbook and reference book of physiology. In 1938, following the death of Macleod, Philip Bard took over the editing of this text and with the assistance of a group of the leading physiologists of the United States has maintained the standards previously set and has kept the volume in line with modern developments and acquisition of knowledge. This book is primarily a textbook and reference book. The typography is excellent and the illustrations are well selected.

* * *

CARDIAC CLASSICS. A collection of Classic Works on the Heart and Circulation with Comprehensive Biographic Accounts of the Authors. Fifty-two Contributions by Fifty-one Authors. By Frederick A. Willius, M.D., M.S. in Med. Chief, Section of Cardiology, The Mayo Clinic; Professor of Medicine, The Mayo Foundation for Medical Education and Research, the Graduate School, University of Minnesota: and Thomas E. Keys, A.B., M.A., Reference Librarian, The Mayo Clinic; Formerly Carnegie Fellow, the Graduate Library School, University of Chicago. St. Louis: The C. V. Mosby Company, 1941. Price: $10.00.

This is a collection of original works on the heart by the outstanding cardiologists of the modern world. Beginning with Harvey's dissertation on "The Circulation of the Blood" the volume includes the translations of the original work of fifty-one great cardiologists. Together with these is appended a comprehensive biography of the authors. These biographies are indeed interesting and the material presented would serve well to orient any physician who is a student of the heart. The use of this collection of material should make the best cardiologist better.

* * *

MEDICAL DIAGNOSIS AND SYMPTOMATOLOGY. By Samuel A. Loewenberg, M.D., F.A.C.P., Clinical Professor of Medicine, Jefferson Medical College; Assistant Physician to the Jefferson Hospital; Consulting Physician to the Philadelphia Hospital for Contagious Diseases and the Philadelphia Psychiatric Hospital; Visiting Physician to the Philadelphia General Hospital, and the Northern Liberties Hospital; Formerly Assistant Professor of Physical Diagnosis at the Medico-Chirurgical College and the University of Pennsylvania, Philadelphia. Fifth edition, entirely revised and reset. Philadelphia: F. A. Davis Company, 1941. Price $12.00

This is the fifth edition of a book originally published in 1929 in which the author compiled a textbook of general information on medical diagnosis thus making it a real general practitioner's book. It is well illustrated and the arrangement is very practical. As a reference for the general practitioner it is recommended. A chapter on special examinations is new and valuable.


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FRACTURES & TRAUMATIC SURGERY—Two Weeks Intensive Course starting September 22. Informal Course every week.
GYNECOLOGY—Two Weeks Intensive Course starting October 20. One Month Personal Course starting August 25. Clinical Course every week.
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# READING NOTICES

### Tetanus Immunization

The disadvantages and hazards of the temporary passive immunity induced by tetanus antitoxin are well known. A prolonged active immunity may now be safely and satisfactorily produced by tetanus toxoid. Several million soldier in France, England, Canada, and Italy have received active immunization during the past four years and to date no case of tetanus has been reported (Mil. Surgeon, 88:371, 1941).

It is generally accepted that alum-precipitated tetanus toxoid is a much more efficient antigen than plain toxoid. Once an individual has received immunization, a stimulating or booster dose at any subsequent time will markedly accelerate the serum antitoxin to a level which will definitely protect from tetanus. Tetanus toxoid is supplied by Eli Lilly and Company in the alum-precipitated form.

---

### New Searle Laboratories to Be Built at Skokie, Ill.

G. D. Searle & Co., Chicago, announces that work has been started on the building of its new laboratories and pharmaceutical manufacturing plant located on the outskirts of Chicago, in the Skokie district.

The contract calls for three stories and basement of 1,500,000 cubic feet. The exterior is to be a modern, streamlined design with continuous windows protected by projecting metal fins, which help to carry out the streamline design.

The laboratory atmosphere is to be carried out throughout the building, except in the auditorium, which is designed not only for meetings of the staff and workers, but for clinical meetings and demonstrations to visiting physicians and interested medical groups.

---

### Rantex for Surgical Masks

The Holland-Rantos Company has been appointed exclusive distributor for Rantex, the newest development for surgical masks and caps—a patented fiber product which is insoluble in live steam, boiling water or common solvents. A magnification of Rantex shows that it is 176 times more protective than a single layer of gauze. As a result, it provides masks and caps which are exceptionally cool, comfortable, light and free from irritating lint or yarn. They are inexpensive enough to be discarded after a single use; yet they can be autoclaved or sterilized.

---

### Sulfaguanidine, New Sulfonamide Derivative, Is Released by Squibb

Sulfaguanidine, the new sulfonamide compound which clinical trial indicates may be of great usefulness in certain diseases of the gastro-intestinal tract, has been released for sale by E. R. Squibb & Sons, New York. It is supplied in 0.5 gram tablets, in bottles of 50, 100 and 1,000, and as a powder in 4-ounce and one-pound bottles; also in 3.5 gram envelopes in packages of 12.

Sulfaguanidine is distinguished from other sulfonamide derivatives by its low absorbability. This causes it to remain in the intestinal tract and exert its antibacterial influence therein. Consequently, it is useful



*Say you saw it in the Journal of the Michigan State Medical Society*

in enteric infections, such as acute bacillary dysentery, and also as a pre-operative and postoperative measure in surgery of the lower intestinal tract.

Like the other sulfonamides, sulfaguanidine has high antibacterial activity. Unlike them, and in spite of its relative solubility in water, it diffuses to a much less extent through the intestinal wall. It is, therefore, possible to obtain a relatively high effective concentration of the drug in the intestine itself (200 mg. per cent) with little penetration into the circulation and consequent systemic effects (1 to 4 mg. per cent concentration in the blood).

A tasteless drug, sulfaguanidine is administered either in tablet form or as powder in water or similar medium. Rather large doses appear to be required; even for children, but the total period of treatment should not exceed 14 days. Recommended dosage and methods of administration are described in the Squibb leaflet on sulfaguanidine.

## MAY THE OSTEOPATH DO SURGERY?

*(Continued from Page 543)*

a fundamental principle of a statutory construction that the legislature must be presumed to have had in mind all previous legislation upon the subject, so that in the construction of a statute we must consider the pre-existing law and any other acts relating to the same subject. We, therefore, reach the conclusion that the legislature has recognized obstetrics as a branch of osteopathy, a conclusion which the court is obliged to follow until the legislature by specific action evidences a contrary view. We are, therefore, of the opinion, after an examination of the legislative history of the laws pertaining to osteopathy and their relation to obstetrics and regulatory requirements as to reporting childbirths, that the legislature has authorized a licensed practitioner of osteopathy to engage in the practice of obstetrics, and that the use of the word "physician" in section 71-2404, Comp. St. 1929, was intended to include regularly licensed osteopathic physicians.

The attorney general contends that defendant is not authorized to use anesthetics in his practice as an osteopath. The 1919 act of the legislature * * * provided in part as follows: "Nothing in this act shall be construed so as to authorize the administration, by an osteopath, of drugs excepting anesthetics, antiseptics, antidotes for poisons and narcotics for temporary relief of suffering." This clearly shows that the legislature intended the use of anesthetics to be included in and authorized by the license to practice osteopathy. In 1927 a new statute was enacted which read as follows: "Every license issued under this division shall confer upon the holder thereof the right to practice osteopathy in all its branches, as taught in the osteopathic colleges recognized by the American Osteopathic Association." * * * We do not think the passage of the 1927 act manifests any legislative intent to deprive the defendant of his previously acquired privilege to use anesthetics, antiseptics, antidotes for poisons, and narcotics for temporary relief of suffering. We are inclined to the view that when a legislative act grants a privilege, as was done in the case at bar, a subsequent enactment will not be construed to deprive a beneficiary of the privilege conferred unless a legislative intent to so do is clearly apparent from the legislation itself. For these reasons, we hold that the defendant, under the statutes as they now exist, is entitled to use anesthetics by virtue of his license to practice osteopathy.

The trial court erred in not granting an injunction enjoining the defendant Gable from engaging in the practice of operative surgery and from publicly holding himself out as licensed and otherwise qualified to perform operative surgery with surgical instruments. In all other respects the judgment of the trial court is correct.

*Judgment accordingly.*

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**The pathologist in direction is recognized by the Council on Medical Education and Hospitals of the A. M. A.**

## DOCTOR'S CAR RANKS AS NEEDED EQUIPMENT

### Day and Night Emergency Calls Require Greater Use of Car for Necessity Trips Than Any Driver Group

In a profession that is no respecter of time-tables, the physician's car is just about as much a part of his professional equipment as his stethoscope or thermometer.

Because the hurry call to a patient's home may come at noon, midnight or dawn, the doctor must keep his medical kit ready and his car on hand twenty-four hours a day.

As a result, the medical man leads all occupational groups in the number of round trips rolled up annually.

His speedometer also ticks off more total miles in the course of a year than any other group, with the sole exception of traveling salesmen.

Such statistical facts, gleaned from nationwide study of the motor car's use, cannot measure the benefits to the sick and suffering which have resulted from the swift mobility of the doctor's car.

Residents of rural areas, who had been far from a doctor's service in the horse-and-buggy days, are especially aided.

Data on the car use show that the doctor's automobile is very much of a business vehicle. Nine out of ten doctors who own automobiles use them in their professional work. The great bulk of their trips are concerned with transportation to and from the office, and on professional rounds.

Out of every 100 doctors who use their private automobiles for necessity transportation, it was found that:

Sixteen average more than 1,500 trips annually.

Fifteen make from 1,000 to 1,500 trips per year.

Ten reported from 800 to 1,000 round trips by car per year.

Twenty-eight range from 400 to 800 trips annually.

Twenty-two average from 200 to 400.

Only nine average fewer than 200 round trips a year for necessity driving.

For all car-owning physicians, the average number of round trips annually per car was found to be 947, of which 842 trips or nearly 90 per cent of the total were credited to necessity purposes.

Naturally, the length of the trips vary from a few blocks to many miles, depending on the doctor's location and the range of his practice.

In rural areas, one half of the trips made by doctors for business purposes average more than 15 miles in length. In larger cities, four out of 10 physicians' cars average this distance or more. (As it is not unusual for a doctor to make a series of calls on a single trip, the city practitioner may cover a considerable distance before returning to his office.)

Of all groups of car users, the doctors rank next to the top, their average distance traveled in a year being 12,932 miles per car. And according to surveys, necessity driving accounted for 8,640 miles of the total.

By comparison, traveling salesmen who lead the occupational list of car users, have an average annual mileage of 18,791 miles, though their number of roundtrips are less.

The doctor's annual total of 12,932 per car is more than twice as high as the 5,750 miles rolled up by farmer-owned cars. And the use frequency of 947 round trips a year reported by the doctors is nearly two and a half times the 392 trips averaged by the farm car. Yet, on a percentage basis, 66 per cent of the doctors' mileage—and exactly the same figure for farmers' mileage—are for economic purposes.

The medical man uses his car nine times for necessity transportation for every social and recreational trip, though the latter is likely to be three or four times longer. The average length of a pleasure trip for doctors is about 40 miles, according to available data, compared with a general average of 10 miles per trip for all necessity driving. But all of his social and recreational driving combined, adds up on the average to only 4,292 miles a year, less than a third of his total.

Occupations which require high mileage and constant use tend to have new or later model cars, as their owners follow a practice of trading frequently. Doctors are in step with this practice. Survey figures show that 89 per cent of doctor's cars were less than five years of age and that 33 per cent were one year old or less at the time of a recent count. — *Automobile Facts,* June, 1941.

**THE MAPLES**

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**Sinus cases**
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**Rectal fistula**
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AMERICAN MEDICAL ASSN. ACCEPTED COUNCIL ON PHYSICAL THERAPY

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The medical service plan movement is becoming fairly well established. California, Colorado, Georgia, Idaho, Michigan, New Jersey, New York, Ohio, Washington, Oregon, Pennsylvania, Wisconsin, Texas, Missouri, Massachusetts, New Hampshire, West Virginia, Connecticut, and Utah are some of the states in which the professionally-sponsored movement is well under way. At least twenty-five plans are in operation, with a total enrollment in excess of 250,000 persons. These programs offer a prepayment medical program to the public which is in accord with sound professional principles as well as serving to counteract those forces which tend to disrupt the private practice of medicine.

The 1941 House of Delegates of the American Medical Association, in considering this medical service plan movement, took the following action:

"Your reference committee further recommends that the House of Delegates reaffirm its belief that the principle of prepaid medical care justifies an experimental period during which time advice and assistance be given to medical societies that elect to conduct such experiments under medical sponsorship. It, therefore, recommends special consideration and approval by the House of this portion of the report."†

The House of Delegates also adopted the recommendation of the reference committee that the Board of Trustees take steps to see that the Bureau of Medical Economics is enabled to establish some method of coördination and interchange of data pertinent to the administration of such plans in order that all state and county medical societies may profit thereby.

### Offset to Propaganda

It is definitely recognized that the professionally sponsored medical service programs are the best offset to the tremendous propaganda by the Committee on the Costs of Medical Care, the National Health Survey of the United States Public Health Service, the National Conference on Medical Care, and the Committee on the Coördination of Health and Welfare Activities in the United States.

Of even greater significance is the protection which the medical service plan affords the private practice of medicine against the inroads of group clinic or lay controlled associations which parcel off the medical market to the few physicians who are under contract to render services. Such plans are nurtured by the Group Health Federation of America, a national organization which has already held its third annual meeting.

These plans, which restrict the individual private practice of medicine, operate throughout the United States and have obtained the patronage of over 120,000 persons. The adverse decision in

*(Continued on Page 578)*

**MICHIGAN MEDICAL SERVICE REGISTRATION HONOR ROLL**

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†*Journal of the American Medical Association*, June 21, 1941, Volume 116, Number 25.

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Housebook giving details, pictures, and rates will be sent upon request. Telephone 2140. Address,

**SAWYER SANATORIUM**

White Oaks Farm

**Marion, Ohio**

*(Continued from Page 576)*

the American Medical Association trial and the sponsorship of the formation of such plans by the Medical Economics Section of the Division of Health and Disability Studies, Bureau of Research and Statistics, Social Security Board of the Federal Security Agency will encourage the organization of more of these plans.

### Continuation of Private Practice

In those states where a medical service law has been passed and the medical profession has taken the lead in the formation of a voluntary nonprofit prepayment program, there is real assurance that the private practice of medicine can continue with ever-increasing opportunities to render more adequate and a better quality of medical service.

The increased good will of the public, of industry, of newspapers, and of the legislature, which has been gained by the medical profession in those states where medical service programs have been inaugurated, alone justifies the wisdom of entering into such an undertaking.

———MSMS———

## COUNCIL AND COMMMITTEE MEETINGS

1. Friday and Saturday, July 11 and 12, 1941—The Council, Mackinac Island.
2. Friday, July 25, 1941—Industrial Health Committee—Wardell Hotel, Detroit—6:30 p.m.

———MSMS———

## COUNTY MEDICAL SOCIETY MEETINGS

*Berrien*—Thursday, June 19—Berrien Hills Country Club—Speaker: Harriett Skemp Nystron, M.D., Chicago, missionary physician, who discussed her adventures encountered in foreign fields. Wednesday, July 16—Niles—Speaker: Muir Clapper, M.D., Detroit—Subject: "Differences in Diagnosis and Treatment of Jaundice."

*Hillsdale*—Thursday, July 24—Hillsdale—Business meeting to discuss recommendations of the Executive Committee.

*Ingham*—Thursday, August 7—Annual golf tournament held at Lansing Country Club.

*Kent*—Thursday, July 10, 1941—Annual Doctor-Lawyer picnic, Blythefield Country Club.

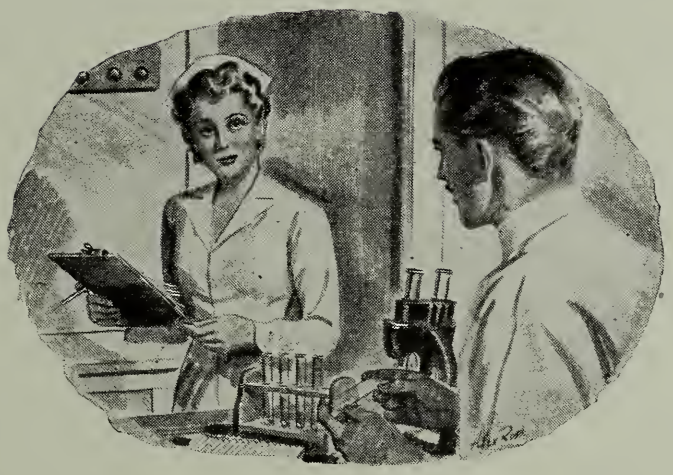
*Muskegon*—Friday, June 20—Muskegon—Speaker: Henry Cook, M.D., Flint—Subject: "Industrial Health and the General Practitioner."

*Oakland*—Wednesday, July 2—Tillson's Beach, Elizabeth Lake—Annual summer frolic.

———MSMS———

## NEW COUNTY SOCIETY OFFICERS

**Eaton County Medical Society**
President—C. J. Sevener, M.D., Charlotte.
Vice President—Paul Engle, M.D., Olivet.
Secretary—B. P. Brown, M.D., Charlotte.
Treasurer—H. W. Hannah, M.D., Charlotte.
Delegate—Don V. Hargrave, M.D., Eaton Rapids.
Alternate Delegate—Paul Engle, M.D., Olivet.



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**A.** Oh yes. Canning does not influence the biological values of proteins. And, of course, the proteins of meats are excellent sources of the essential amino acids. (1)

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The general practitioner is a specialist in every department of medicine. He must be abreast of the times and ever ready to treat promptly and successfully every case that may present itself to his notice.

While the surgical pendulum is swinging far past the center, on towards the limit of its vibration in the unattainable, and every doctor now seeks to be a surgeon of renown, and we are solicited on every hand to notice the long list of successful operations being performed daily by our brethren of the knife and saw, it may prove refreshing to step aside from this grand procession and, seeking the humble walks of professional life, to spend one day with the village doctor, whose sole aim is to do good and who seeks neither fame nor station. Let us go with him on his daily rounds, notice his way of doing business, listen to the instruction he gives his patients, and look over his shoulder as he prescribes.

We may find some of his prescriptions worthy of preservation, some of his methods worthy of adoption.

His first call is in the early morning. A messenger in breathless haste announces that Mrs. K. had by mistake given the baby turpentine instead of castor oil. While his hands are busy with a hasty toilet, his mind is also busy, sweeping the broad avenues of materia medica, where poisons and antidotes arise as apparitions at his command. As he takes down his medicine case, we see the doctor take from the shelf a bottle of olive oil. In a few moments he stands before his patient, a child of six months. The mother had been up with the child all night, as it had been suffering for several days with a heavy cold and had grown worse in the night. She at last had bethought herself of the castor oil, and in seeking to give the child a dose of this medicine, had by mistake filled her spoon from a bottle of turpentine that stood in a similar bottle on the same shelf. The quantities of phlegm that had accumulated in the child's throat and stomach served to parry this heavy stroke inadvertently aimed at its little life. There had been vomiting and most of the turpentine thrown off, but the burn and irritation remained. The mouth and throat were blistered, and the babe in agony. It is given a half teaspoonful of olive oil at once and this is repeated in five minutes, and so for half an hour vomiting continues from time to time; but the oil is soothing, and with the burns on the face and lips covered with a thick paste of salaratus and water, the child grows easier and rests quietly. Directions are left to give a half teaspoonful of the oil every half hour till the bowels are moved freely, when the child will be out of danger.

The following prescriptions are left for the mother's use in the further care of her child. For restlessness and nervousness, the following prescription will be found of great service. Containing neither opium nor chloral, it can be given to the smallest child without danger of serious consequence, and yet attended with soothing, quieting results in every case:

Rx. Oil Anise, m xxv
Alcohol, oz. ij
Fl. ext. valerian, oz. j
Ol. meth. pip. m. xv
Tr. camphor, dr. ij
Fl. ext. licorice, oz. j. M.S.
Shake the bottle.

Dose—One-fourth to one-half teaspoonful in water; repeat as needed.

For the cough, one grain muriate of ammonia in half teaspoonful of glycerine, every three hours.

As the doctor steps into the street, he is hailed by a clerk on his way to open his employer's store, who says, "I wish you would give me something for my cough. It kept me awake nearly all night by a continued tickling, and irritation in my throat. I don't raise much, but am sore all over from coughing so much." The following prescription is written:

Rx. Tict. opii, dr. j
Fl. ext. lobeliae, dr. ss.
Fl. ext. yerbae santae
Fl. ext. grindeliae robustae, aa oz. ss.
Chloroform, c.p., dr. ss.
Syr. scillae comp., q.s., oz. ij. M.S.
Shake the bottle and keep well corked.

Dose—One drop on the tongue; repeat every five minutes, till the cough is better.

We are glad to see a bright half-dollar come out of the clerk's pocket and go into that of the doctor.

Passing on, he hears a great out-cry as he nears a boarding house, and someone calls, "Run for the doctor, quick;" but he is at hand and goes within. A child had been playing near the stove while the breakfast was in preparation, and had succeeded in depositing on its abdomen part of the contents of a dish of hot gravy. The result was a blister as large as a man's hand, extending from umbilicus to epigastrium; child is two years old. Its writhings are very similar to convulsions, its screams arousing every one in the house. The doctor, cool and collected in that babel of confusion, takes from the shelf an unbroken package of saleratus, pours half of its contents into a tin wash dish, adds enough water to this to make a thick paste, and covers the burn with this mixture, making the application half an inch thick. As soon as this is applied, the child stops crying and is free from pain.. Leaving orders to keep the child quiet all day, and not allow the soda to become dry for eight hours, he quietly leaves the room. As he passes through the hall, a lady calls from the stairway for him to come to room No. 9. Here he finds a lady who had been confined three days before, in whom the flowing had ceased for several hours and she was suffering considerably. The nurse had used injections and had exhausted her resources, but to no purpose, and as there was a slight rise of temperature, she feared puerperal infection and fever. The doctor tells her to prepare a thick poultice of pulverized anise-seed, and apply this to the vulva as hot as could be borne, and renew when it becomes cold. This will, in a few hours, have the desired effect.

A few hasty strides and he reaches his own home,

*(Continued on Page 582)*

*Read before the twenty-sixth annual meeting of the Michigan State Medical Society, Saginaw, June, 1891.

No food (except breast milk) is more highly regarded than Similac for feeding the very young, small twins, prematures, or infants who have suffered a digestive upset. Similac is satisfactory in these special cases simply because it *resembles breast milk so closely*, and normal babies thrive on it for the same reason. This similarity to breast milk is definitely desirable—*from birth until weaning.*

A powdered, modified milk product especially prepared for infant feeding, made from tuberculin tested cow's milk (casein modified) from which part of the butter fat is removed and to which has been added lactose, vegetable oils and cod liver oil concentrate.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods

*One* level measure of the Similac powder added to *two* ounces of water makes 2 fluid ounces of Similac. The caloric value of the mixture is approximately 20 calories per fluid ounce.

# SIMILAC } SIMILAR TO BREAST MILK

M & R DIETETIC LABORATORIES, INC. • COLUMBUS, OHIO

*(Continued from Page 580)*

where breakfast awaits him. It will be no breach of etiquette to see of what he makes his morning meal. Good bread and butter, rich milk, thick cream, fragrant coffee, rolled oats eaten with butter and sugar, constitute the repast. He is not made "loggy" by meat, nor dyspeptic by pastry, but with his stomach filled with easily digested nutritious food, he goes about his work not realizing that he has such an appendage as a digestive apparatus.

Immediately after breakfast, in accordance with a fixed and proper habit, the promptings of nature are heeded. The wisdom of the maxim: "Always trust in God, and keep your bowels open," is manifest in the life and works of our friend.

The bell of the telephone has been jingling some little time, when he lowers the trumpet and notes down the calls that come from distant points.

With elastic step he reaches the home of his first patient, a lady of 60 years, who is thin and nervous, anæmic and dyspeptic; habitually constipated; subject to severe and frequent headaches. Her diet is mostly bread, potatoes, and tea; she has a weak, irregular heart; pulse jerky and intermittent. For this condition of the heart she is ordered to take, night and morning, 10 drops of the fluid extract of cactus grandiflora. From the words of praise that come to the doctor every day in regard to this "heart medicine," he is encouraged to continue its use. As an aid to the digestion, she is given a prescription for extract of malt, with pepsin and pancreatin, to be taken in teaspoonful doses, with meals.

If the useful effects of malt were better understood by the profession it would be more largely used than it now is. As a tonic she is given this prescription:

Rx. N. F. 370, oz. vj.
Sig.—One teaspoonful before each meal.

This is almost the same as Fellows' Syr. of the Hypophosphites. It can be prepared by the local druggist. Every physician and every druggist should have a copy of a book of formulæ, published by the American Pharmaceutical Association, known as the National Formulary. From this the doctor has received many useful suggestions in prescribing, and made many friends by reason of the palatable prescriptions that he has found in this collection of formulæ.

The next case is one of chills and fever in a child of 12 months. It needs a cathartic and it needs quinine.

For the first is written:

Rx. N. F. 382, oz. jv.
Sig.—One teaspoonful twice daily till bowels are regulated.

This is the Comp. Syr. of Senna, containing senna, rhubarb and frangula, and is an admirable laxative for children.

The prescription for the chills is as follows:

Rx. Quinine Sulph., dr. j.
N. F. 54, oz. jv. M. S.
Sig.—One teaspoonful every three hours.

This is made from yerba santa and is a complete mask for bitter tastes. Children take this and cry for more. The physician who uses this will have many friends among the children, and the praises of the mothers as well.

Word is brought that a child had fallen from a tree and broken an elbow. On examination a fracture of inner condyle of humerus, with partial dislocation of elbow with angular deformity is discovered. By manipulation, the fracture is adjusted and the dislocation reduced. Cold application is made to the joint by first wrapping it in flannel and around this is passed several coils of small rubber hose. One end of the hose is secured within a large pail beneath the couch. By siphoning the water through this tube the local action of cold is applied to the joint without the annoyance of wet clothing that would result from the application of water or ice applied directly to the parts. By proper use of this, the swelling and pain that so frequently attend such injuries can be very effectually controlled.

But what is most interesting to us in this case is the very peculiar splint the doctor provides for this injury. It looks as though it was made of cloth, but on handling it, it is found to be as hard as a board.

The way this is made is as follows: Dissolve by aid of heat one pound of gum shellac and one ounce of borax in a pint of best alcohol. Cut from heavy cloth the size and shape needed, perforate or make pores by means of a shoe punch, if desired. Also render antiseptic, if need be.

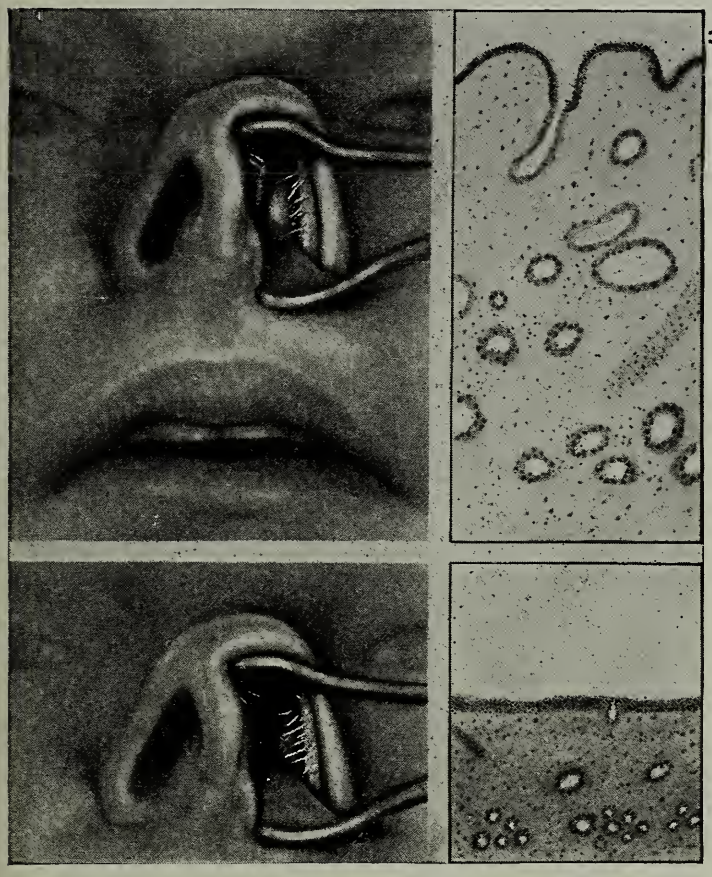
Now on this cloth spread a thick layer of this shellac mixture. Dry it quickly into the cloth in an oven, or before a hot fire. When it is all taken up by the cloth, add another layer of shellac and heat it in; repeat this till the meshes of the goods are filled. It is now ready for use. Warm the splint so as to make it easily bent, and then apply gently to the injury. By careful handling it can be moulded to any joint at any angle, even if swollen and painful. After moulding gently to the parts, it takes an impression distinctly of every protuberance and depression. In a few moments it sets or hardens into an immovable splint. It is now taken off, as it but encircles one half or two-thirds of the posterior surface of the joint; being lined with thin, absorbent cotton, it is replaced, and a light roller bandage applied to hold the splint in place. The sleeve (ripped in the seam at the wrist) is pulled down over the splint, and with a large safety pin made fast to the clothing over the breast of the child. When we find that the bandage, splint, and sling are completed and thus adjusted, the child can walk about at pleasure without danger of harm to the joint. When necessary the splint can be removed and passive motion of the joint made. As swelling subsides, or, if necessary, changes in angle of flexure are made, they can be accommodated by warming the splint and moulding it to the limb in its new position and reapplying. This form of splint will be found useful in fracture of the lower jaw.

The next case is one of "the Grip." Temperature 103°; respirations 36; pulse 60; headache intense—head feels as big as a barn; can't take a long breath; short, dry cough; lungs congested; pain in legs and back; frequent desire to void scanty, high-colored urine; bowels constipated; tongue coated heavily, with deep red transverse cracks; great thirst; nothing tastes good. Patient is a man of 30 years. The doctor places on the patient's tongue a tablet containing 1-50 gr. nitro-glycerine. In a few moments it dissolves, and is absorbed. The feeling of largeness of the head is intensified for a few moments, and then rapidly vanishes; the breathing becomes easier; this remedy often acting like magic in dispelling lung congestions. He is now given 25 grains of calomel and 10-grains of acetanilid, at one dose, to be followed in four hours with a Seidlitz powder; Seidlitz powders to be repeated every two hours till the bowels move freely. Acids and cold drinks strictly forbidden for 24 hours. Hot milk in teacupful doses ordered every three hours. As long as fever and headache continue, 5 grains of acetanilid are to be taken every fourth hour; alternating with this, 5 drops of fl. ext. gelsemium are to be given in water, and continued until the action of the kidneys becomes normal. Before leaving the patient, the doctor puts 10 drops of the tincture of nux vomica into a glass of water, saying, "Stir this well, and give him a teaspoonful every hour, if he has pain or soreness in the bowels following the action of his cathartic."

As he passes through the hall, he is asked by a domestic in the family, to prescribe for her. She is a

*(Continued on Page 584)*

# PATHOLOGY OF THE UPPER RESPIRATORY TRACT



(*Above*) Allergic Rhinitis
(*Below*) Five Minutes after application of Neo-Synephrin Hydrochloride

## ALLERGIC RHINITIS

IN ALLERGIC RHINITIS, relief from nasal congestion is the thing the patient urgently demands—the single criterion by which he evaluates treatment.

To bring such relief

## NEO-SYNEPHRIN HYDROCHLORIDE

(laevo-alpha-hydroxy-beta-methyl-amino-3 hydroxy ethylbenzene hydrochloride)

shrinks the nasal mucous membrane swiftly—with more prolonged effect than ephedrine, and with lower toxicity in therapeutic dosage.

There is no "sting" on application, and unpleasant side reactions are a rarity.

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### DOSAGE FORMS

**Emulsion** ¼% (1-oz. bottle with dropper)

**Solution** ¼% and 1% in saline solution (1-oz. bottles)
¼% in Ringer's Solution with Aromatics (1-oz. bottles)

**Jelly** ½% (in collapsible tubes with nasal applicator)

EMULSION

SOLUTION

JELLY

**FREDERICK STEARNS & COMPANY, Detroit, Michigan**

New York Kansas City San Francisco Windsor, Ontario Sydney, Australia

*(Continued from Page 582)*

large woman, of Bohemian descent, about 40 years of age, the mother of one child, now about 16 years old. She complains of a lump in her breast, that is sore and painful to the touch. It has been growing for several months, but she refrained from calling a doctor for fear she would be told it was cancer. When first noticed it was not as large as the end of her little finger; it is now as large as her thumb. The pain is of a sharp, stinging kind, paroxysmal in character. She can't bear her clothing to touch it, and has been obliged to leave off her corset for a long time. The shoulder and arm is lame, and she has some pain under the arm. The doctor finds, on examination, a hard, movable, sensitive tumor, deeply imbedded in the right mammary gland, an inch to the upper and outer side of the nipple. The following is ordered: One drop of the fluid ext. of poke root (phytolacca decandra), to be taken three times a day. If we could see this case in three months, we would find the lameness of shoulder and arm all gone; the tumor reduced more than half; its sensitiveness abolished; the pain from axilla removed. She is wearing her corset again, and able to pursue her work as usual. By continued use of this remedy the doctor has removed many tumors from the breasts of ladies who must otherwise have had to resort to the knife of the surgeon.

A call comes from a row of tenement houses, where the sanitary surroundings are bad. Here are three children, less than a year old, all suffering from entero-colitis; vomiting, purging, restless, moaning, high fever; back of head very hot; outlook is bad. Step near and see what is done. Calling for a glass of water that had previously been boiled, he places therein a tablet containing 1-100 gr. of the arsenite of copper. When dissolved, a teaspoonful is given to each child; this dose is repeated every ten minutes for an hour; after this one dose every hour till the bowels are better. This remedy is destined to take an important place in the treatment of enteric troubles, both acute and chronic bowel troubles yielding to its influence in these ridiculously small doses. But why should we question this, when we are prescribing Fowler's solution in drop doses, or bichloride of mercury, 2 grains to a quart of water, as a sure germicide? For the fever in these cases, one half drop tr. aconite every two hours. For heat in back of head, 5 grains of bromide of potassium every fourth hour. For weakness and prostration, 5 drops of brandy every half-hour. Careful directions as to diet, nothing allowed but Swiss condensed milk (as they are all fed artificially); no water allowed but that which has been previously boiled. To sweeten the air of the rooms and to render wholesome the atmosphere of the vicinity, Platt's chlorides are ordered to be used freely all over the premises.

But other cases need attention. Here is a child with capillary bronchitis and a double inguinal hernia. Child is 5 months old. Every effort at coughing only makes the already distended scrotum more prominent. A flax-seed meal poultice is at once placed around the child, completely enveloping the chest from chin to stomach, held high in place by straps over the shoulders, the pattern for the poultice cloth being one of the child's dress waists, cut so that it comes up well under the arms. Without especial care, nearly every such poultice is placed on a child, assumes the form of a circingle, acting as a cold damp zone around the body, and is found on examination to be resting snugly on the abdomen. But made thin and properly applied, and secured, then covered outside with warm flannel, it proves a source of comfort, and a curative agent. For the fever, one-fourth drop tincture of aconite is to be given in water every hour. For coughing the following:

Rx. Ammon. carb. dr. j.
Glycerin.
Syr. bals. tolut. aa oz. ij. M. S.
Half teaspoonful every two hours.

In passing, we note that, in every prescription for children, the doctor uses glycerine in place of simple syrup, as it prevents rather than produces acid fermentation in the stomachs of children. Brandy is given in 5-drop doses every hour till better. The hernia next requires attention. Careful taxis is made. The head and shoulders meanwhile being lowered by lifting the feet and limbs to an angle of 45° to 90°, inverting the body, and allowing the force of gravity to carry the bowels far within the abdominal cavity; the hands of the doctor are placed over the inguinal rings and held there till the following simple but effective truss is applied: To a flannel band, long enough to pass once and a-half around the child, and about 5 inches in width, are fastened two square bags of unbleached muslin, filled with fine sand. These bags are 1¼ inches square, and serve as the pads of the truss. Between the pads and the skin a thin layer of absorbent cotton is interposed; then, when all is in place, draw snug and fasten with safety pins. An elastic tape can be secured before and behind, passing between the thighs. This completes a simple and complete device for the treatment of inguinal hernia in children. Instructions are given to keep this truss constantly on the child for two years, never allowing the bowels to protrude; care also being used to prevent chafing. In the hands of a mother of common sense this will prove a success every time, as the doctor has often demonstrated.

It is now far past the noon hour. The people where he is, give him a dinner of roast meat, potatoes with gravy, water for drink, rice pudding for dessert, with fruits. A few moments are spent over the daily papers and he is away again to see a patient who lives at some distance.

This is in the factory district, where quite a clinic awaits him.

A child has a large glass bead up its nose, and quite a crowd of women are assembled. The doctor places the boy on a chair with head well thrown back, and the mother is told to place her mouth over the child's mouth and to blow as hard as she can, the doctor holding his finger on the nose so as to completely close the nostril opposite the side where the bead is. After some demurring on the part of the boy and hesitancy of the mother, the attempt is made and fails; but on finding that the bead is nearer the outlet of the nose she tries again, and the bead goes bounding over the floor, while the mother seeks a handkerchief to remove the debris from her face.

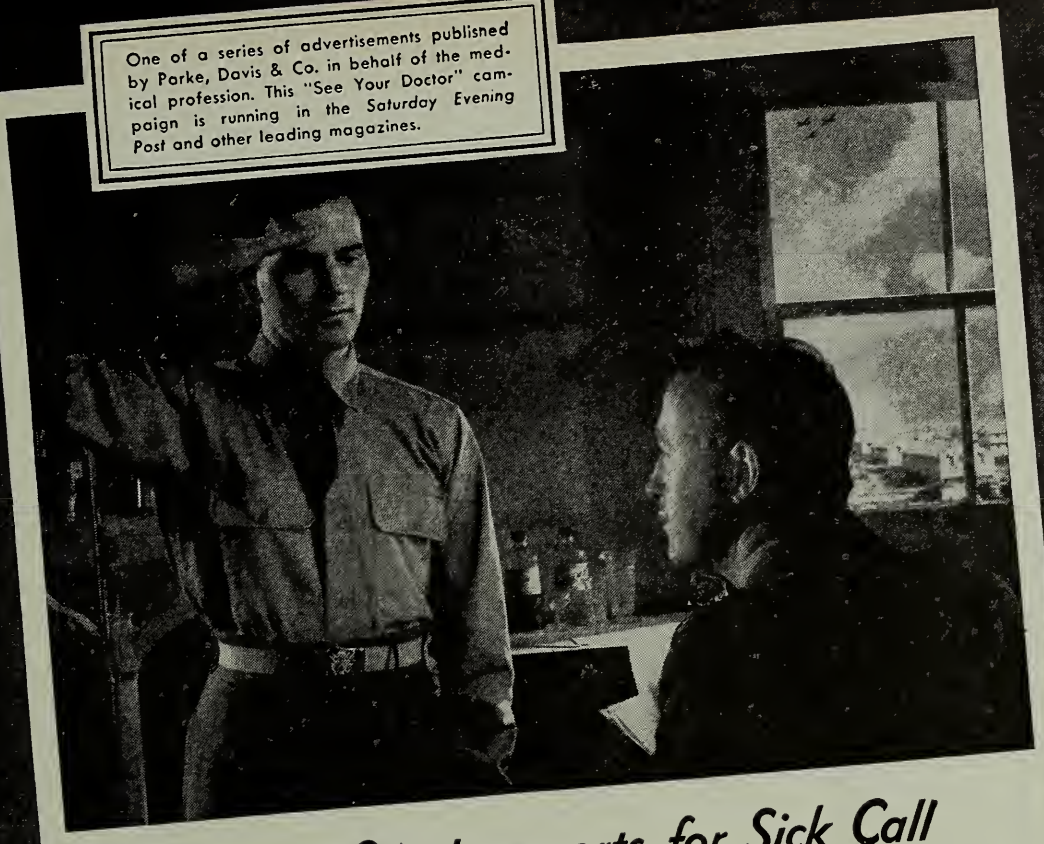
A storm of applause follows, and when it subsides several women come to the doctor for advice. A young mother says: "I wish you would give me something for my baby. I can't say that he is sick, but he worries all the time and I can't do anything with him. He won't nurse, and yet he seems hungry all the time, but the moment he takes the nipple he pushes it away and cries." The baby is carefully examined and handed

"Madam, you are to blow into this child's mouth and clear out the nostrils, just as this lady blew the bead from her boy's nose. The nose is filled up away back where you could not reach it with your hairpin." After some nervous hesitation on the part of the mother, the trial is made and quite a quantity of mucus blown out. This is repeated several times, when the child is given the breast, and, seizing it with all the avidity of starvation, takes its fill of nourishment, not letting go till it falls asleep.

Another woman presents her baby. It has a cold and a very hard cough that the cough medicines fail to relieve. The cough is loose, but the paroxysms were violent and exhausting when they occurred. The same plan of clearing the air passages is advised and tried, as the child is beginning to cough. When the air passages were thus cleared, the coughing ceased. This was caused by the catarrhal accumulations dropping back into the throat and exciting cough by tickling and

*(Continued on Page 586)*

One of a series of advertisements published by Parke, Davis & Co. in behalf of the medical profession. This "See Your Doctor" campaign is running in the *Saturday Evening Post* and other leading magazines.



# *Private Smith reports for Sick Call*

PRIVATE TOM SMITH is feeling a little under the weather.

If he were back in civilian life, the chances are he'd say, "I'll be all right in a little while," and he'd show up for work as usual.

But in this man's Army of ours, a soldier who feels below par is required to report for "Sick Call," even if he thinks there's nothing much wrong. Private Tom Smith is simply obeying orders.

Because of this wise institution known as "Sick Call," our Army doctors have an opportunity to combat illnesses at the very start and are usually able to prevent them from edging over into the danger zone. This is one of the reasons why the standard of health in our Army of 1941 sets an all-time high.

In this there is a valuable lesson for many a civilian . . .

We're thinking now of the man who permits himself . . . and his family . . . to run risks which no soldier is allowed to take. We're thinking of the man who says, "If I don't feel better tomorrow, I'll see the doctor." But will he? And when he does, will it be too late? Too late to prevent a serious illness, or too late to gain the advantage of time in treating a disease already contracted.

So why not establish the "Sick Call" system in your household? Stomach ache, you know, is sometimes the first warning of appendicitis; a sore throat may be the forerunner of a condition which requires expert attention. When you, or any of your family, develop even a seemingly minor ailment, don't waste time which may be precious.

Call your doctor, and let *him* decide whether or not the ailment is trivial—and what should be done about it. He knows—you don't. Report for "Sick Call" promptly

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SEVENTY FIVE YEARS OF SERVICE TO MEDICINE AND PHARMACY

PARKE, DAVIS & COMPANY
Detroit, Michigan

*The World's Largest Makers of Pharmaceutical and Biological Products*

SEE YOUR DOCTOR

*(Continued from Page 584)*

irritation in the pharynx. She is advised to watch the child and, when it begins coughing, to clear out the air passages in this way, and that she will accomplish more than by cough medicines. The doctor is heard to remark: "If physicians, nurses, and mothers only knew how much comfort they would afford the children under their care by this simple procedure, they would adopt it at once."

Another woman says: "My boy had the croup last night, and we are afraid he will have it again tonight. Can't you give something to keep it off?"

The following is written:

Rx. Quinine sulph., gr. xxxij.
N. F. 54, oz. j. M. S.
Shake the bottle.

Give one teaspoonful at 4 p.m. and one teaspoonful at 8 p.m. each evening till better.

Four grains of quinine at a dose as above, will, in most cases, abort a case of ordinary croup.

A young lady comes to the doctor and says, in a whisper: "I want something to restore my voice, as I am to take part in a church concert tomorrow."

She is given:

Carb. ammon., gr. j.
Chlorate potass., gr. v.
Sacch. alb., gr. xx.
Aquae, dr. j.
A dose this size to be taken every hour till better.

Another miss, whose face is covered with comedones and erythematous eruptions, asks for help. She is given Fowler's solution—ordered to take one drop after each meal for a month. After removing the blackheads by pressure, she is to bathe the face three times daily with the best C. P. Peroxide of Hydrogen.

And here is a young man who has had to lay off because "he has so many boils."

One teaspoonful of tincture of arnica is put in a tumbler of water with directions to take one teaspoonful every hour. He is also given one dozen 2-grain pills of sulphide of calcium, with directions to take one after each meal till he can taste rotten eggs.

And here is a case of sore eyes. They say: "He has wildhairs" (whatever that may mean). Examination reveals a severe conjunctivitis, the result of a cold and exposure. Order a tablespoonful of Epsom salts in half a glass of water to be taken at once; repeat every second day till better. In a clean earthen dish one half drachm of boracic acid is placed and dissolved in a pint of hot water. He is ordered to sit by this bowl and to make constant and continued applications of this hot water for half a day at a time, and to continue this till the redness is all gone, and to keep the water hot all the time.

Again the doctor talks to himself, and we hear him say: "If people only knew how much good is to be derived from water, both hot and cold, there would be a less number of calls for the medical man."

But he has not long to moralize, for an emergency has arisen that will tax him severely. He is called to a child that has had convulsions, and has now been in a fit for an hour. The ladies in attendance have had it in a hot water bath, with cold to the head, for nearly that length of time, and yet it relaxes not, but rigid and stiff, seems in articulo mortis. It takes but a moment to apply to its nostrils a bottle of amyl nitrite, an inhalation or two relaxes the spasm, and now the chloroform is used as an inhalant. The child is ordered to be removed from the bath, wiped dry, and wrapped in warm flannels. The doctor calls for a long, stiff feather, and with this he clears out the phlegm and accumulations in the throat. The jaws are pried apart, and held so by a lead pencil between the molars. The feather is pushed down the throat and twisted slowly round and then removed, wiped and returned, and this repeated many times to clear out the passages and to excite vomiting, if possible. And now 25 grains of sulphate of zinc, in a teaspoonful of warm water, is forced down the throat. The rapid whirling of the feather is again introduced into the throat to assist the efforts of vomiting, and soon the contents of the stomach are ejected, the spasmodic action removed, and the child assumes a natural composure and quietly falls asleep. Leaving orders for perfect rest and quietude, for the next six hours, the doctor takes his leave.

By this time it is past sunset, and on reaching home he finds a bowl of bread and milk (which is his simple repast at night) awaiting him. When this is partaken of, he spends an hour in his study with the medical journals. These read through or glanced at, his quick eye catches from a page just the best grains and seed thoughts, he turns to his accounts and from weariness nods over the ledger. In a moment he rouses and seeks his couch, and there we leave him, wrapped in the embraces of "Tired Nature's sweet restorer, balmy sleep."

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# The Surgical Dyspepsias

By Ambrose L. Lockwood, D.S.O., M.C., M.D., C.M., F.A.C.S., F.R.C.S.(C)

Lockwood Clinic, Toronto, Canada

Ambrose L. Lockwood, M.D.

*M.D., McGill University, 1910. Spent several years in postgraduate work in New York, London and Germany. Caught in Berlin at outbreak of the Great War—escaped and joined the Royal Army Medical Corps and served as a surgical specialist with them five years. Awarded the D.S.O., M.C., the Mons Star, and was three times mentioned in dispatches. After the war he returned to Mayo Clinic, and was on the Surgical Staff there till the summer of 1922, when he established his own Clinic in Toronto. Has published numerous treatises in the field of Thoracic and General Surgery, and has recently published an exhaustive summary of his experiences in War Surgery through the British Medical Journal. Member Canadian Medical Association, Ontario Medical Association, American Association for the Study of Goiter, and the Society of Military Surgeons.*

■ Space will not permit me to enlarge on the rôle that focal infection in teeth, tonsils and sinuses play in the etiology of dyspepsia.

Expert roentgenology and closer coöperation among all members of the profession in the study of disease have revealed serious conditions, hitherto overlooked, which serve to perplex the profession in determining etiology, symptomatology and methods necessary for relief of symptoms indiscriminately referred to as the dyspepsias.

### Esophageal Diverticula

May I at once direct your attention to esophageal diverticula, not an altogether uncommon problem, and yet overlooked for seven and a half years in a large collected group of cases. The symptoms point directly to the condition, and it can be so accurately diagnosed roentgenologically, and so easily dealt with surgically by a one or two-stage surgical procedure under local anesthesia. Because of the loss of weight, the cough and mucus it has in the past been most commonly diagnosed as tuberculosis (Figs. 1 and 2).

### Cancer and Stricture of the Esophagus

I shall merely point out that an ever-increasing number of successful resections of the esophagus are being reported. Earlier diagnosis will materially extend the field of operability. The relief afforded by early gastrostomy in carcinoma of the esophagus should be kept in mind.

### Cardiospasm

Cardiospasm is another all too common condition, overlooked also for about eight years on the average, and here again the symptoms point directly to the lesion, and it likewise can be easily diagnosed roentgenologically and at least 75 per cent can be cured by dilatation with the hydrostatic dilator (Plummer), a relatively simple procedure, with practically no mortality, and affording an almost miraculous cure. Twelve per cent require several dilatations to effect a cure, and the remaining 13 per cent develop a "lag," and of these at least one-half are ultimately cured by periodic dilatations. The condition is too often diagnosed as cholecystitis, gastritis, or neurosis as illustrated by the following case.

A young married woman, aged thirty-four, had complained since fourteen years of age of difficulty in swallowing, regurgitation of food and mucus, foul breath, distaste for food, and loss of weight, strength and energy. She had a dilatation with relief at seventeen years of age—not again until twenty-six years of age, and not again until a few months ago. Now, unfortunately, after all these years she has developed an enormous sigmoid type of cardiospasm. From the roentgenograms you can judge the tremendous amount of foul decayed food she had retained in the great sacculation that had resulted from the prolonged atresia at the cardia. She was emaciated, had a profound anemia, a constant, distressing cough with a great deal of foul mucous, and had been diagnosed at first as a neurosis and latterly as tuberculosis. After nearly three weeks of daily lavages the esophagus was finally sufficiently clear of retained food to permit the passage

of a linen thread through the cardia, the stomach, and into the intestine. She was dilated with great care, and with no little difficulty under direct fluoroscopic vision. She has had three subsequent dilatations, gained weight and feels that she is cured, but she may require esophagogastrostomy for complete relief as, unfortunately, so many of the sigmoid type of cardiospasm require. However, she has such marked dilatation and sacculation that the operation, in experienced hands, should not be particularly difficult, and entails a relatively low operative risk. It is indeed difficult to understand how such a condition could possibly be overlooked for such a long period (Figs. 3, 4 and 5).

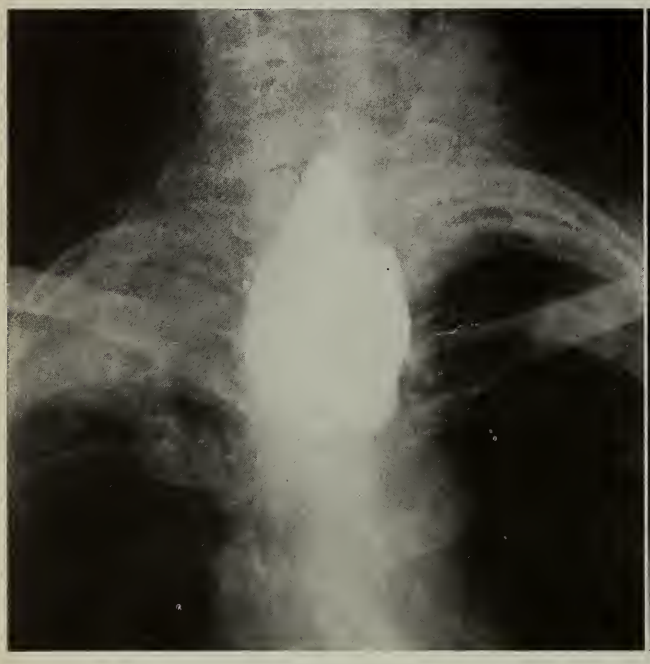

Fig. 1.

Fig. 2.

Operative measures devised for the cure of ordinary atresia are no longer warranted, and should not be employed. They carry too high a mortality and the results of even a successful operation are incomplete and uncertain. Further investigation as to etiology is necessary, and earlier recognition is imperative.

### Diaphragmatic Hernia

This is another all too common condition that we have all overlooked until very recently.

Prior to 1925 a relatively few cases had been diagnosed during life, and a very small percentage of these had been dealt with surgically,[1,2,4,5,6,10,12] but since 1925, 600 cases have been diagnosed, and 260 operated upon—74 per cent of these occurred through the esophageal hiatus.

The symptoms are referred to the epigastrium, and a little to the left of the mid-line. The symptoms, while more indefinite than those of esophageal diverticula and cardiospasm, are fairly clear cut, and do point direct to the condition. Epigastric distress with regurgitation of gas, sour fluid or food, periodic vomiting, bloating, difficulty in belching of gas at times, paroxysms of smothering, occurring immediately after eating, and occasionally hemoptysis and melena suggest the presence of a herniation through the diaphragm, and warrant immediate roentgenological examination. One negative roentgenological finding is not sufficient in the presence of such a history as the organ or organs are not always incarcerated in the hernia. The symptoms, of course, vary with the organ or organs involved in the hernia, and whether incarcerated or not, and the extent of such incarceration. While in approximately 74 per cent the cardiac end of the stomach herniates through the esophageal hiatus or adjacent to it, the colon, the spleen, and even small bowel may be involved.

Cholecystitis and peptic ulcer with obstruction at the pylorus are the most common errors in diagnosis, and a very high percentage of such patients have been operated upon for these conditions, of course without relief.

Mrs. S., No. 105004, aged forty-two, a dentist's wife, had had three major operations for relief of symptoms without any benefit over a period of four years, and

yet the condition was not sought for even at operation. She had had the symptoms since fourteen years of age. Her complaints were typical—roentgenological examination revealed more than half the stomach herniated through the esophageal hiatus. She was immediately relieved by operation under a block anesthesia, but the procedure was not made easier as a result of the adhesions remaining from the three previous operations. In addition, it required no little tact and persuasion to avoid a judicial procedure against the former surgeon for loss of time, suffering and distress incidental to three major surgical procedures, and for remuneration for the heavy expenses entailed (Fig. 6).

Fig. 3.

Fig. 4.

Fig. 5.

Such a case illustrates the wisdom and indeed the necessity of sweeping the hand over the diaphragm and particularly the esophageal hiatus in the course of all operations in which the abdomen is opened. Exploration at operation has frequently revealed the condition when it was not otherwise suspected. If the esophageal hiatus will readily admit two fingers the possibility of periodic herniation of the stomach through the hiatus must be kept in mind.

*Treatment.*—Treatment should be medical if distress is not too great and obstruction is not constant. If incarceration is maintained with constant distress and recurring symptoms due to obstruction, surgery should be advised. The presence of peptic ulcer, cholecystitis or appendicitis must be kept in mind, and dealt with at the time if at all possible. The operative procedure for relief of diaphragmatic hernia is not technically difficult if adequate exposure is ensured, with experienced assistants, and under a select anesthesia. Surgeons undertaking the procedure for the first time should study the method developed by Harrington who has dealt so successfully with such a large number of cases.

In the differential diagnosis of the "Surgical Dyspepsias" one must have in mind certain conditions that frequently contribute to the picture and serve to cloud the recognition of an associated surgical basis for the indigestion, viz.: hepatitis, cirrhosis, hyper- and hypochlorhydria, syphilis of the stomach, tabetic crisis, angina, abdominis, abdominal migraine, Henoch's purpura, abdominal angioneurotic edema, intestinal and pulmonary tuberculosis, Bright's disease, pernicious anemia, lead poisoning, acute and chronic pelvic infection, occasionally uterine fibroids and ovarian and parovarian cysts, spastic and cathartic colitis and the functional dyspepsias. These and gastric disturbances incidental to certain respiratory and circulatory diseases, faulty kidney elimination, acidosis, altered metabolism, neuroses, psychoneurosis, anemias, environment, phlegmatic temperament and disregard of the

Fig. 6.

esthetics of life must be considered but are beyond the scope of this address.

### Intra-abdominal Conditions

In passing on to the more common and direct causes of surgical dyspepsia, may one point out that the stomach is the mouthpiece for a host of other organs. The duodenum, when alkaline, has the paramount right over the stomach in control of the pylorus, and this control is possessed to a variable extent by the derivatives of the mid-gut down to the splenic flexure of the colon, and accounts for gastric distress in intestinal disease.

Lesions of the intestinal tract from the pylorus to the splenic flexure may cause gastric symptoms as a result of pylorospasm, to prevent food passing through the pylorus into the bowel. As a result, the emptying of the stomach is retarded, digestive functions are interfered with, fermentation and secretory changes occur, and symptoms of dyspepsia appear.

**The fundus of the stomach is a later development, and so more under the control of the central nervous system. A feeling of repletion after meals, fullness, bloating and such subjective symptoms develop. There probably is no complaint of gastric distress without obstruction. Obstruction itself may be due to reflex spasms, to direct pressure and blockage from within or without.**

The more common direct causes of dyspepsia amenable to surgery are first those outside the stomach as—appendicitis, gall-bladder disease, lesions of the pancreas, tumors, cysts, herniæ, Pott's disease, and perhaps aneurysm, and secondly, those occurring in the stomach and bowel, viz.: ulcer—tumors—benign and malignant, diverticula and diverticulitis, linitis plastica, syphilis of the stomach, and gastrojejunal ulcer.

The space at my disposal will not permit me to deal at length with all the more direct causes of surgical dyspepsia, but very briefly—

### Pancreas

Lesions of the pancreas, especially acute and chronic pancreatitis, should be readily recognized. The severity of the pain, abdominal rigidity, intense epigastric tenderness, vomiting, ileus, shock, in fact all the symptoms of acute intestinal obstruction without obstruction should point to acute pancreatitis. Cysts of the organ, adenomata, carcinoma and stone in the pancreatic duct must be kept in mind. An ever-increasing number of patients with cysts and tumors of the pancreas are being successfully dealt with surgically. Care must be taken, however, not to give surgery a black eye in forcing a wide resection for carcinoma which may not extend life a day, and may have a fatal termination on the operating table or within the next few days.

### Herniæ

Inguinal, postoperative, umbilical and ventral herniæ, particularly with a loop of bowel or more often an impacted portion of omentum may, by traction and obstruction cause atypical upper abdominal distress, and should be sought for.

### Meckel's Diverticulum

The incidence of Meckel's diverticulum should be kept in mind and the fact that retention, ulceration, perforation, hemorrhage, traction, and even malignancy are associated with it, and in all indeterminate dyspepsias it should be ruled out.

Acute but particularly chronic intussusception must be kept in mind. The latter is commonly overlooked for a long period of years.

### Appendix

The rôle of the appendix, the gall bladder and ducts scarcely need to be enlarged on as a cause of surgical dyspepsia. I am, however, sufficiently old-fashioned to believe that chronic appendicitis does exist, that it accounts for a high percentage of patients with typical pylorospasm and particularly accounts for persisting pylorospasm after surgical procedures on the duodenum, gall bladder and even the stomach when, for one reason or another, the appendix has not been removed.

### Gall Bladder

As regards the gall bladder and liver ducts, I believe too much credence is placed in the roentgenograms.

**Roentgenograms of the gall bladder are of great value, but ONLY when POSITIVE.**

It should be kept in mind that disease of the gall bladder is four times as common in women as in men, that jaundice is absent in nearly 40

per cent of patients with stones even in the ducts, that at least 20 per cent never have had colic, that stones may be present for years in the gall bladder, and even the ducts and yet be completely silent; that carcinoma of the gall bladder is not rare and is usually associated with stones; that in almost 25 per cent of patients with stones in the gall bladder the ducts should be likewise explored at operation, and finally that patients with gall bladder disease not relieved by medical régime should be dealt with surgically and not continued on symptomatic treatment till the pancreas and heart are involved, malignancy develops, or a major catastrophe occurs with a stone impacted in the ducts, or an acute gangrenous gall bladder, possibly with perforation.

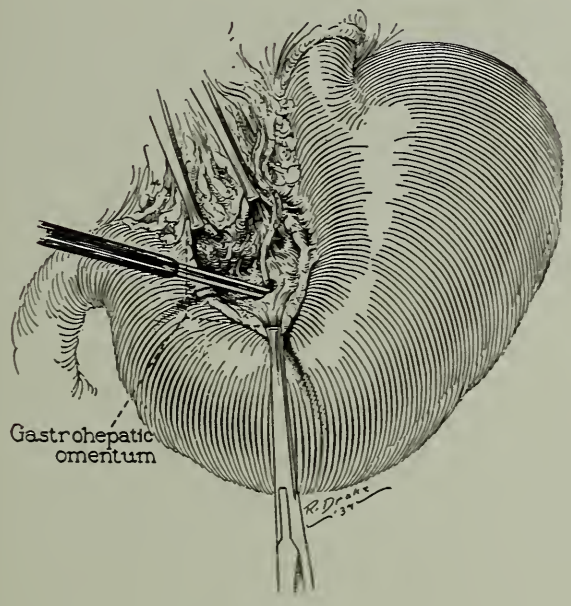


Fig. 7a.

Fig. 7b.

### Stomach

Syphilis of the stomach presents a group of symptoms more diverse than any other disease of the organ. The average age incidence, thirty-eight years, is younger than for carcinoma. The general condition of the patient is better than in those with malignancy. Achylia occurs in a higher percentage, approximately 80 per cent as against 46 per cent in carcinoma. There is seldom a palpable tumor, no filling defect, and rarerly retention. The response to antileutic treatment is rapid, and is a most valuable therapeutic test. It is not a surgical problem.

### Linitis Plastica

This, a most interesting condition, is still overlooked, and few patients present themselves early enough to justify radical resection. Life has been prolonged and in greater comfort by a very high resection.

### Carcinoma and Ulcer

Ulcer, carcinoma and hour-glass contracture present a group of symptoms that usually make roentgenologic examination imperative. Exhaustive differntial analysis of the symptoms associated with these lesions does not enter the scope of this paper.

Suffice it to point out that ulcers are of three types: First, those that are benign and remain benign, those that are benign and become malignant, and those that are malignant from the onset. Expert roentgenologists can, as a rule, recognize a malignant ulcer, but they cannot, with any degree of accuracy, diagnose an ulcer as benign. Great care should be taken prescribing medical régime for a patient with gastric ulcer, lest valuable time be lost and the opportunity for a complete surgical cure lost. All of us have seen very painful instances of such an error. If medical treatment is instituted and the ulcer does not promptly respond to treatment as proven roentgenologically, surgery should not be delayed (Fig. 7).

The Balfour cautery excision with suture and posterior gastro-enterostomy is the operation of choice for small, well localized benign ulcers and reinforcing suture of heavy silk. The patient can be up and about on the second postoperative day, and leave the hospital quite safely on the

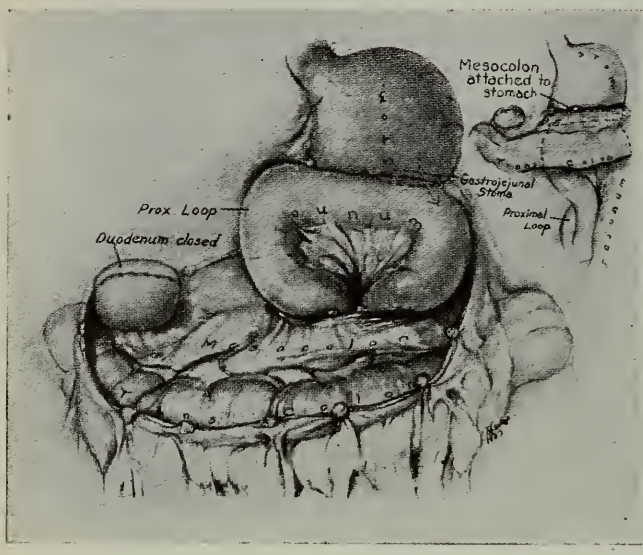


Fig. 8.

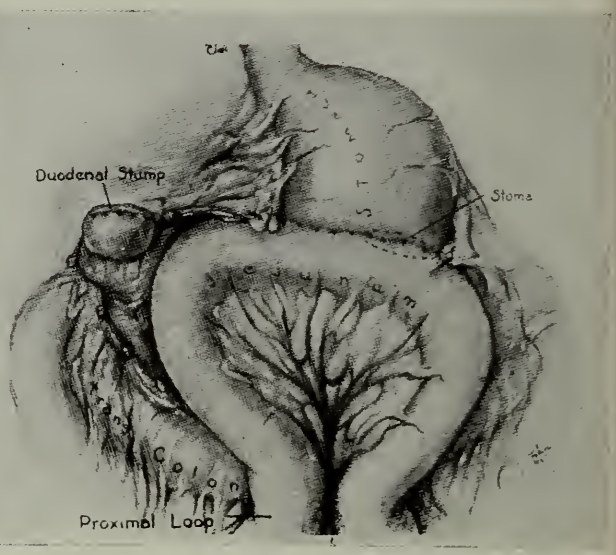


Fig. 9.

a gastric resection of the Polya-Balfour type or anterocolic type for the more extensive lesions (Figs. 8 and 9).

As regards carcinoma of the stomach, we must keep it constantly in mind that one-third of all cancers in men and one-fifth in women occur in the stomach; that approximately 11 per cent are silent and rarely diagnosed till too late to effect a surgical cure; that in not more than 50 per cent are we justified in even exploring the abdomen, and that less than half of these can be resected with a fair chance of materially prolonging life, much less securing a complete cure.

**Complete gastrectomy is being employed in an ever-increasing number of late cases, and even in the presence of glandular involvement and localized metastasis in the liver, should be carried out. This procedure, at first sight a heroic one, will, I believe, in skilled and experienced hands prove to carry little, if any, greater mortality than the more conservative resections.**

I should like to urge in all questionable cases that the exploration should be carried out under local anesthesia, and if further surgery is impossible, that the incision should be closed with third or fourth day. In this way, prolonged hospitalization is reduced, expense avoided, and a higher percentage of patients will not hesitate to permit of what appears to the patient, relatives and friends as a trivial procedure.

*Diagnosis.*—Fatigue for no obvious reason, distaste for food, especially meat, and a vague whitish-lemon tint to the skin are the earliest symptoms, but, unfortunately, frequently the growth is already too wide-spread to permit of a cure. Only by routine examinations of all patients over thirty years of age every ten months, with periodic gastric roentgenological examination will carcinoma of the stomach be recognized sufficiently early to permit of a higher percentage of surgical cures. The value of roentgenological examination in the diagnosis of carcinoma of the stomach, makes it important and necessary to develop the simplest, most economical and time-saving method of gastric and duodenal roentgenologic study, if an increasingly large percentage of patients are going to avail themselves of it. Carman's method of fluoroscopic examination with two or three films for record purposes is all that is necessary, and takes but a few minutes of the patient's time. Taking innumerable films, and bringing the patient back time after time for four to six days to follow the

barium, demands so much of the patient's time, and creates such needless expense that patients will not submit to frequent periodic check-ups

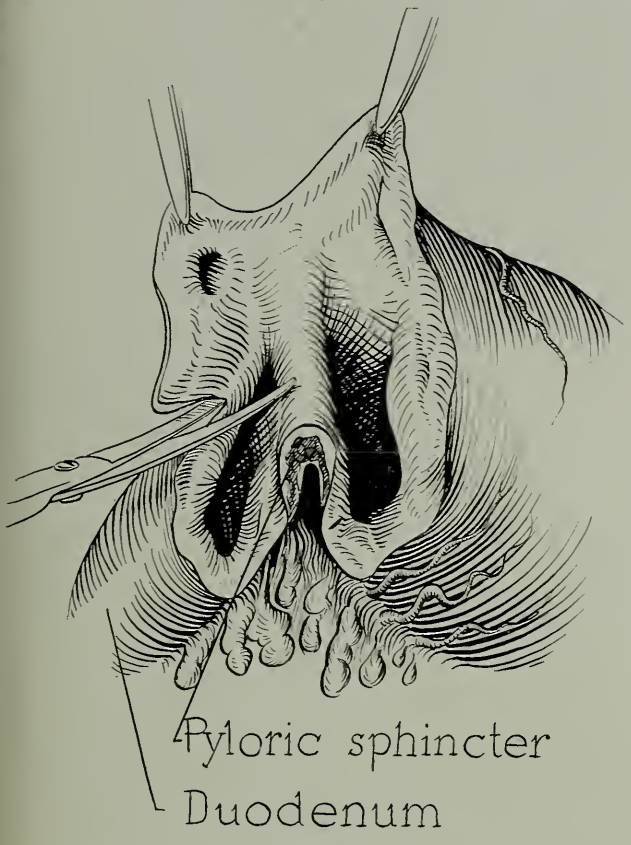


Fig. 10.

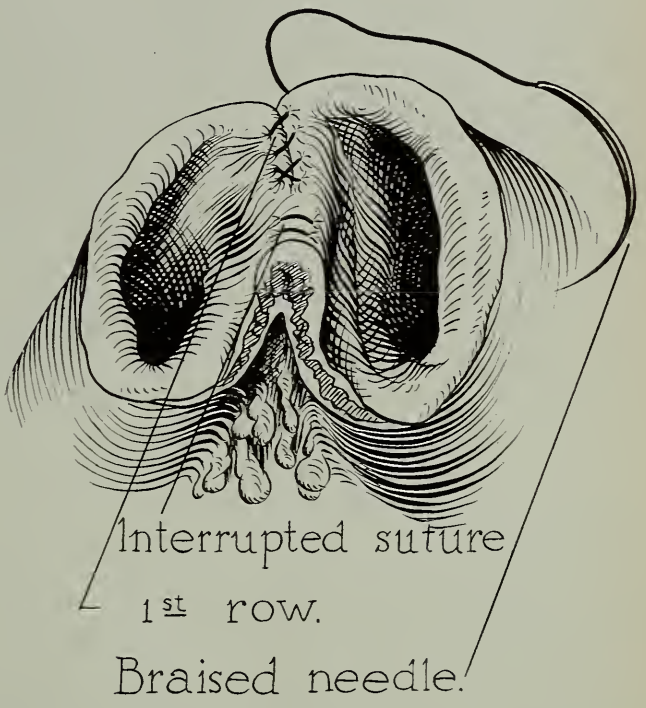


Fig. 11.

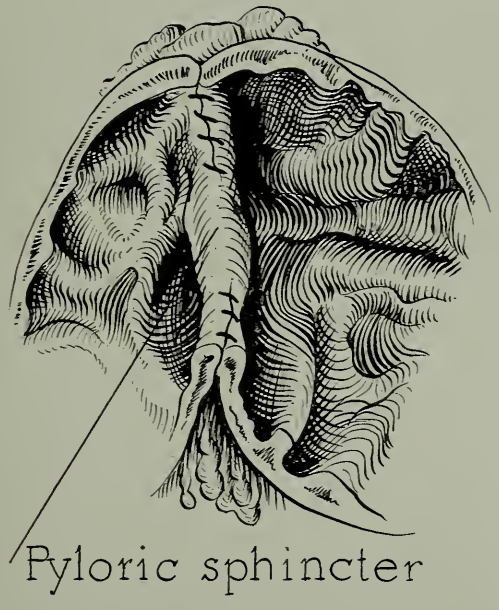


Fig. 12.

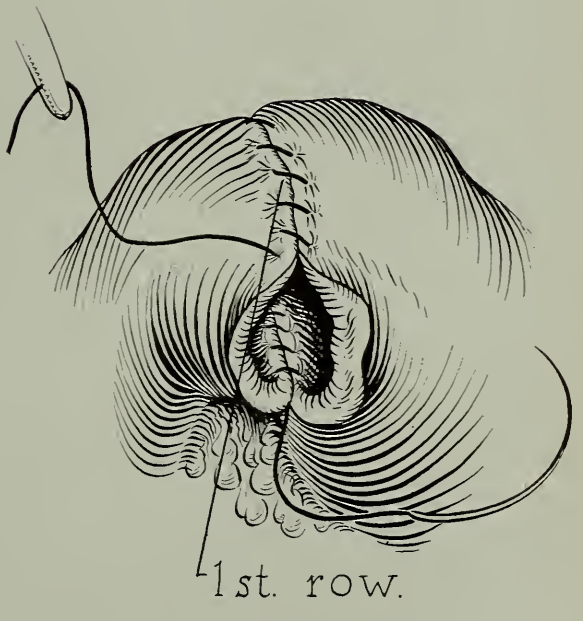


Fig. 13.

or recommend it to their friends, and, besides, little if any additional evidence is found by such a time-wasting and expensive method of examination. Gastric resection, even gastrectomy, should not entail a mortality of more than 4 to 8 per cent. A higher percentage of periodic health examinations, including periodic gastro-intestinal roentgenological examinations, thorough pre-operative preparation, and resection in the hands of an experienced surgeon dealing with the condition daily will effect a much higher percentage of cures in this altogether too common and serious condition.

### Duodenal Ulcer

Space does not permit me to deal at length with this most important problem either from a diagnostic point of view or in a review of the various measures employed surgically to circumvent the lesion. It is on the increase affecting approximately 13 per cent of the white collar population. It is one of the great crippling diseases of our time. Many conditions simulate duodenal ulcer, but a duodenal ulcer simulates nothing else. The periodicity of the symptoms, the pain—food—ease syndrome point to the lesion, and it can be diagnosed roentgenologically with 97.3 per cent accuracy. There has been a deplorable tendency on this continent in the last fifteen years to resort to medical measures, diet, mucin, Larostidine, and what not, for too long a period, and to defer surgery till a major catastrophe occurs due to obstruction, a penetrating lesion, perforation, or a fatal hemorrhage. One reason for this has been the unfortunate and unwarranted tendency in this country to advise and practice extensive gastric resection for the condition. The procedure was based on the experiences of certain central European surgeons. This was a gross error. Nearly thirty years ago I recognized that duodenal ulcer in central Europe was an entirely different entity from that I had seen on this continent. There it is associated with a widespread gastritis that is not seen in this country, except in central European races segregated in our large cities. In such patients high resection is the operation of choice, as it is for those with recurrent bleeding and wide-spread ulceration, extreme stenosis and peri-duodenitis and obstruction with marked hyperacidity, in which instances we have employed it for more than twenty years (Figs. 10-13).

The Finney and particularly the Judd type of pyloroplasty, designed to remove the ulcer and at least four-fifths of the pyloric valve and reconstruct the normal alignment of the duodenum and stomach is much less difficult to execute, entails almost no mortality, avoids the risk of a gastrojejunal ulcer, and does not burn all our bridges as in gastric resection, and leaves with us several alternatives should an ulcer recur, which is very rare. The Von Haberer operation and Horsley method are valuable in selected cases, and that long, well-established procedure, posterior gastro-enterostomy remains the operation of choice in a very definite percentage of patients.

### Gastric Diverticulum

Gastric Diverticulum is a rare condition, but must not be overlooked; about 150 cases have been reported in the literature. The majority have been found on the posterior wall of the stomach, close to the lesser curvature, and with about equal frequency at the pylorus, and at the cardia. Diverticulum has rarely been reported on the greater curvature or on the anterior wall of the stomach. The symptoms are largely those of gastric ulcer, and the diagnosis depends on fluoroscopic examination. Roentgenologists who rely on multiple films will miss a high percentage of gastric diverticula as they likewise frequently miss a deeply pitted adherent ulcer on the posterior wall. The inherent tendency of irritative lesions of the stomach to develop malignancy, and the fact that many instances of carcinoma developing from the border of a diverticulum have been reported, make it imperative to deal surgically with the diverticulum if it can be readily approached. Retention is common and hemorrhage occurs. Dietary and medical régime gives some relief.

### Duodenal Diverticula

It is still necessary to stress the necessity of searching for duodenal diverticula in all patients with vague and atypical upper abdominal distress. While, for many years, diverticulum of the esophagus, the bladder and Meckel's diverticulum has been recognized and dealt with surgically, duodenal diverticulum, an equally distressing condition, occurring more frequently has been relatively overlooked all these years as a surgical entity.

Prior to 1912, approximately 100 cases had been reported, all discovered accidentally at operation for some other condition or at necropsy. In 1913, Case,[3] then at Battle Creek, was the first to recognize the condition roentgenologically and reported four cases. As late as 1920, in a review of the literature, he found only eighty cases so diagnosed. Neil John MacLean[9] of Winnipeg in 1923 reported sixteen cases, of which four were dealt with surgically. In 1924, Nagel[11] of the Mayo Clinic reported 140 cases, discovered at operation or necropsy, four of which were operated upon. In our own Clinic

ninety-seven cases have been diagnosed roentgenologically, and thirty-eight of these have been dealt with surgically. An exhaustive review of

Fig. 14.

Fig. 15.

Fig. 16.

reported cases shows an incidence of 2.2 per cent of routine necropsies. We have found them in approximately 1.7 per cent of routine gastrointestinal roentgenological examinations.

Space will not permit me to deal at length with the etiology, pathology, symptoms, relative sites and complications of this interesting condition. They are congenital in origin. In 60 per cent of our cases the diverticulum occurred on the inner border of the second part of the duodenum, 30 per cent in the third part, and only 10 per cent in the first part of the duodenum, and so must not be conflicted with pouching in the base of a healing duodenal ulcer found almost entirely in the first part of the duodenum close up to the pylorus. Of our cases only two occurred on the outer curvature of the bowel, and only one on the anterior surface. All were retroperitoneal except this latter one. They vary in size from 1 cm. in diameter to one that contained over 1,000 c.c. of fluid and hung down over the grim of the pelvis as reported by Pilcher. They occur at any age, but are more common in patients past the fourth decade.

*Diagnosis.*—The symptoms are fairly clear cut and point to the condition. Patients complain of pain and deep tenderness usually a little to the left of the mid-line, above the navel about opposite the ninth costal cartilage. It varies in type and intensity, depending on the site of the diverticulum, the size of it, the diameter of the opening into it, whether or not ulceration with or without bleeding, perforation or retention exists, and of course the nature of the foods ingested. The pain occurs soon after eating, is often severe and spasmodic, often of a bursting type, and associated with a sense of fullness and distension locally, but not with bloating, as seen in cholecystitis. Deep soreness and tenderness frequently transmitted through to the back exists in large diverticula particularly if there is ulceration and marked retention due to a narrow opening and a long drawn-out neck leading into the sac. A narrow neck measuring 3 to 5 cm. in length was found at operation in several of our cases. The pain and soreness was present over a period of years in our patients. There is no periodicity in the symptoms, no periods of well-being as with duodenal ulcer. The pain—food—ease syndrome of duodenal ulcer does not exist. The pain is relieved by belching of gas and the taking of soda, but usually more completely by vomiting, which is very frequently induced. Patients dread food and avoid it, and as a result most patients have lost considerable weight, are anemic, generally debilitated, and develop that distressing mental outlook that characterizes patients who have for a long time been unable to eat types of food they enjoy. While the symptoms suggest the condition, expert and painstaking fluoroscopic examination must be relied on for accurate diagnosis and localization of the sac. They take a bizarre form. There may be a wide opening into the sac, a narrow opening or as previously pointed out a small opening, with a neck leading to a sac that is cylindrical in outline or irregular. They may be multiple. Bleeding is not rare and ulceration and perforation of the

sac does occur. We have had one perforate into the gall bladder, and later into the colon in a man of sixty-five years of age while on rigid medical régime, with a near catastrophe as can well be imagined.

*Treatment.*—The treatment should be surgical if distress persists in spite of adequate dietary régime. Surgical treatment consists in dissecting and freeing the sac; the neck of the sac is crushed in a curved forcep, ligated, the sac severed, and the pedicle then oversewn and buried. If the sac is not easily located in the first or second part of the duodenum, the duodenum should be incised, a finger inserted, the opening into the sac located from within and the finger passed into the diverticulum if the opening and the neck of the sac is sufficiently large to permit it. This method simplifies the freeing of the sac from its attachments. If a duodenal ulcer is present as well, and particularly if the sac has dissected and embedded itself too deeply in the pancreas, it is wiser to rely on a gastro-enterostomy to relieve the distress rather than injure the pancreas or unduly extend the operation in attempting to dissect out the sac as well (Figs 14, 15, 16).

A diverticulum in the second portion of the duodenum comes off the upper border of the bowel, retroperitoneally, and drops down behind the bowel. It can readily be exposed by elevating the transverse colon and mesocolon, and by making a small opening at the reflection of the peritoneum posteriorly, one comes directly on the duodenum. The sac should then be dissected free from above, delivered up and removed. Drainage is unnecessary.

Patients are at once relived of their complaints by surgical treatment. In the thirty-eight patients operated upon we have had no deaths, postoperative complications or recurrences of the diverticula. Is it strange or difficult to believe, that when we find patients with such distress from a duodenal ulcer, that we should likewise find patients with distress from a duodenal diverticulum in which retention, ulceration, hemorrhage, and even perforation occurs? I crave your indulgence for stressing the question of duodenal diverticulum, but I am convinced by experience that there is a definite percentage of patients with upper abdominal distress, a truly surgical dyspepsia, due to duodenal diverticulum, that is being constantly overlooked in the roentgenological examination of the duodenum.

## Conclusions

1. Greater accuracy in the diagnosis of diseases of the gastro-intestinal tract have revealed serious conditions overlooked hitherto and has materially increased the problems that perplex the profession in determining the cause, course, symptoms and measures for relief of symptoms vaguely referred to as the "dyspepsias."

2. There has been during the last twenty years an ever decreasing mortality in dealing surgically with the surgical dyspepsias.

3. Earlier and more accurate diagnosis; thorough rehabilitation of the patient prior to operation in the greater use of glucose, calcium, various vitamins and particularly blood transfusion; a select anesthesia, preferably I believe spinal (Pontocaine) with adequate pre-operative sedatives and perhaps intravenous injections; dispatch at the operating table, and multiple stage operations when indicated have collectively contributed to the successful surgical treatment of the causes of surgical dyspepsia.

Finally and equally important is the urgent necessity of educating the public to the wisdom of periodic examination, and the profession to the importance of a careful, detailed history, thorough laboratory investigation, and above all expert, time-saving and relatively inexpensive roentgenological examination of all patients with even the faintest symptoms of so-called surgical dyspepsia.

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# Xanthoma of the Tongue

## A Case Report

By Frank A. Lamberson, M.D.
Detroit, Michigan

Frank A. Lamberson, M.D.

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■ A xanthoma is not a rare tumor. It is most commonly seen associated with diabetes and in those cases in connection with the long muscles of the arms and legs.

Xanthomatous involvement of the tongue, however, is more unusual. I can find only four cases mentioned in the literature. Spencer and Cade[3] report a female, aged forty-five, who presented herself at Westminister Hospital in 1926 with a small tumor on the right border of her tongue.

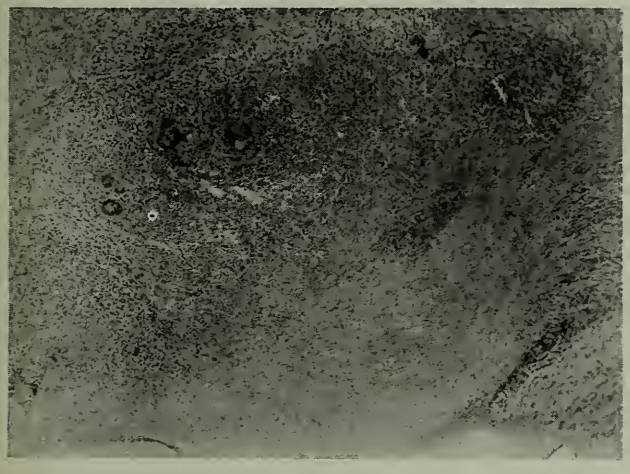

Fig. 1. Postoperative microsection showing the tumor.

She had been treated for diabetes. The tumor was excised without incident. They had a similar case in 1922. Butlin[1] had a patient who was jaundiced and had numerous xanthomata with two pea-sized nodules on the tongue which on excision were typical xanthoma. Smith,[2] in 1912, reported a case similar to Butlin's.

A sixty-year-old, white, Finnish man presented himself at the University Hospital clinic on August 10, 1938. He complained of a lump on the left border of his tongue of three years' duration which had gradually enlarged. The lesion was moderately painful and tender.

Examination was essentially negative save for the tongue which was altered by the presence of a tumor 4 x 2½ cm. on its surface. It was oval, white, firm, slightly raised and tender. There was no history or evidence of diabetes. No other lesions were found. Pathological diagnosis was xanthoma. The tumor was excised under avertin anesthesia on August 14, 1937. It was well encapsulated, shelling out easily. Postoperatively the tongue healed without complication and on August 26 the patient was discharged.

Two months following the excision there was no evidence of recurrence of the tumor.

The microphotograph demonstrates the lesion in the tongue.

19600 Grand River

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———MSMS———

# Cerebral Anoxia and Craniocerebral Injuries*

By Frederic Schreiber, M.D.
Detroit, Michigan

Frederic Schreiber, M.D.

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■ The neurological surgeon is constantly engaged in mortal combat with the five-headed hydra of cerebral anoxia. These five heads are: (1) *anoxic anoxia,* in which the arterial blood is insufficiently saturated with oxygen; (2) *anemic anoxia,* in which the oxygen capacity of the blood is abnormally low; (3) *stagnant anoxia,* in which the blood circulation is too slow; (4) *histotoxic anoxia,* in which the utilization of oxygen by the cell is hindered by extrinsic agents; and (5) *neurohumeral anoxia,* in which cerebral oxidation is hindered by a disarrangement of essential cell components. Depending on the extent of the assault, these heads may singly, or in combination, destroy neuronal tissue. Considerable cerebral tissue may be permanently lost as a result of anoxic insult and yet the life of the individual may be spared. The object of treat-

*Read before Michigan State Medical Society, the 75th annual meeting, Detroit, Michigan, September 26, 1940.

ment in most cerebral conditions is not only to save the patient's life, but also, which is often more important, to safeguard the cortex as much as possible from the ravages of cerebral anoxia. It should be obvious that any method of treatment which increases the anoxic hazards of the brain cell also increases the mortality and morbidity in these cases and cannot, therefore, properly be called a method of treatment.

### Anoxic Anoxia

A consideration of craniocerebral injuries and the manifestations and mechanisms of cerebral anoxia will outline some principles which have application in all forms of neurological surgery. The mortality and morbidity are extremely high in those cases of craniocerebral injury in which there is evidence of respiratory difficulty, and a much better prognosis can be given if no concomitant respiratory difficulty exists. When the respiratory center in the medulla is thrown out of rhythm as a result of trauma, the brain is deprived of its oxygen supply from the lungs, with resulting anoxic anoxia. Inhalations of high oxygen concentrations may offset this critical state if the respiratory rhythm can be reëstablished fairly quickly before lethal damage results. Unfortunately, however, stimulants or oxygen administered in some cases of severe medullary trauma have the same effect as whipping a dead horse, and the cerebral cells die before oxygen can be supplied to them in adequate amounts.

**The anoxic anoxia caused by mucus or by the tongue obstructing air passages of the unconscious patient following head injury can, of course, be remedied by an airway, turning the head on the side, or aspirating the mucus.**

If the weather is very warm, or if the unconscious patient has fever, which is usually present if the function of the brain stem has been interfered with by trauma or destroyed by anoxia, then an extra ration of oxygen must be supplied by mask or tent. The oxygen demand is increased by external heat or fever to a degree beyond the ability of the vital mechanisms to supply it in adequate amounts, with a resulting relative anoxic anoxia.

### Stagnant Anoxia

Stagnant anoxia is present in very many cases of serious brain injury. The cerebral circulation is slowed as a result of intra- or extracerebral hemorrhage, or because of perineural or perivascular edema associated with anoxia, thus setting up a vicious circle. The patient may be irritable, restless, maniacal, convulsive or stuporous, depending on the degree of oxygen want and the brain areas involved. There is often the temptation to restrain these patients with drugs when they disturb relatives, nurses or other patients.

**However, when morphine, barbiturates or other sedatives are given in dosage sufficient to quiet this patient, it must be remembered that histotoxic anoxia produced by these drugs is added to the already present stagnant anoxia and the combined effect of these two anoxic factors only makes the situation of the oxygen-hungry cerebral cells more desperate.**

The fact that such a patient is quieted by sedative drugs does not mean that his condition has improved: indeed, his chances for recovery may have been definitely lessened. The undesirable effect of giving narcotics to the restless patient following head injury has been recognized and warned against for many years by all neurological surgeons. To further deprive the cerebral cortex of oxygen when the clinical evidence of oxygen want is already present is like kicking a drowning man in the face when he comes up for air. Usually if the patient who is suffering from stagnant anoxia associated with head injury is not restrained, but is allowed to turn about on a wide mattress or on two beds lashed together, he will quiet down and come to his senses. If restraint is necessary, physical restraint is much safer for the life and cortex of the patient than restraint with drugs.

### Anemic Anoxia

If considerable blood has been lost by an individual with a craniocerebral injury, any mental confusion and restlessness may be in part due to anemic anoxia. Every effort should be made to make it easier for the remaining red cells to support life by carrying oxygen, and therefore a supply of high concentration of oxygen by tent or mask, and transfusion should be afforded as quickly as possible. I have seen extensive cortical disintegration as a result of an hour of anemic anoxia from hemorrhage coincident with the stagnant anoxia of low blood pressure result-

ing from considerable blood loss. The brain damage may be permanent, depending on the degree of anoxia, even if adequate blood volume and circulation are reëstablished. Here again, narcotic and sedative drugs are not only ill-advised but much less efficient in controlling restlessness and mania than are pure oxygen inhalations and blood transfusions.

The use of pleonectic drugs such as sulfanilamide must be considered under the head of anemic anoxia and their anoxic effect properly evaluated in the treatment of craniocerebral injuries. A full dose of sulfanilamide may reduce the capacity of one-third of the red blood cells from carrying the normally required amount of oxygen, thus producing the same effect in the patient had he lost a third of his red blood cells from hemorrhage. Normally the brain can tolerate the oxygen deprivation of sulfanilamide with relative safety, and the occasional neurological manifestations are due to temporary cell dysfunction rather than the result of irreversible cell change.

**However, the widespread prophylactic use of sulfanilamide in craniocerebral injuries to lessen or prevent infection, is attended with risk of consequential importance. Frequently the cerebrum, which has already had some anoxic insult as a result of injury, cannot tolerate the added burden incident to the administration of sulfanilamide.**

### Anesthetics

When surgery is necessary in craniocerebral injuries, as in the case of depressed fractures, extradural hemorrhage, subdural hematomas or hydromas, the choice of an anesthetic is vitally important. The patience required in operating on these cases under local anesthesia rather than general anesthesia is rewarded by decreased mortality and morbidity. The added histotoxic anoxia from a general anesthetic, no matter how expertly given, may tip the scales against recovery in an individual whose brain is struggling against the stagnant anoxia resulting from increased intracranial pressure. The neurological surgeon has learned of the untoward effects of narcotics and general anesthetics, in cases with increased intracranial pressure through tragic experience.

The obstetrician is faced with a similar situation in his practice. Histotoxic anoxia in the fetal brain is caused by drugs and anesthetics, before stagnant anoxia is superimposed by increased intracranial pressure in the birth canal. It is immaterial whether one type of anoxia precedes the other. The danger to the cerebral cells results from the combined anoxic effect, which, if severe enough, can permanently destroy brain tissue.

### Neurohumeral Anoxia

Neurohumeral anoxia must be guarded against in the unconscious patient who has suffered a craniocerebral injury and who may not have had sufficient fluids or food for some time. If the available salts or sugars in the cerebral cells become depleted, cellular oxidation cannot take place and typical anoxic degenerative lesions may occur. The alcoholic patient who has had a severe head injury frequently presents this problem. He may not have taken food for some days and often enters the hospital in a dehydrated condition with an extremely low blood sugar. He may be maniacal, unconscious or having convulsions. Morphine or other sedatives should never be given to this type of patient. A nasal tube should be passed and orange juice, milk and eggs introduced into the stomach. One advantage of the tube feeding over the intravenous injection of sugar or salt solutions is that the stomach can select the necessary food and fluids better than the surgeon can estimate the right amount of sugar, salt or fluids to be placed into a vein; also less damage is done by the wild patient who pulls out his nasal tube than the one who dislodges his intravenous needle. If intravenous fluids are given, care must be taken not to give more fluids than the brain cells can tolerate. Anoxic cerebral lesions as a result of intravenous feeding in too large volume can be demonstrated at autopsy.

I would like to report a case which illustrates some of the points in this discussion. During the hottest week of summer I was called to see a young man, a fairly heavy user of alcohol, who had received a fracture through a frontal sinus as a result of an automobile accident. He had walked into the hospital complaining of some headache and was put to bed. Fluid intake was limited to 1000 c.c. daily. Because of the sinus fracture he was given heavy doses of sulfanilamide. He became irritable and was given nar-

cotics and barbiturates in fairly large amounts. On the third day after admission he developed a temperature which remained at 105° for three days until the time that I saw him in consultation. On examination there was no evidence of meningeal infection. The patient was cyanotic, drowsy and very irritable. His pulse and respirations were rapid. Deep reflexes were all exaggerated.

The patient was given as much water and orange juice as he would drink, sulfanilamide was discontinued and he was placed in a cool oxygen tent with a ten liter flow. His temperature came down immediately, his irritability and drowsiness disappeared and he has remained entirely well since this time.

This man gave a clinical picture of cerebral anoxia. The anoxic factors to be considered were: (1) anoxic anoxia (extremely hot weather with increased oxygen demand); (2) anemic anoxia (oxygen carriers tied up by sulfanilamide); (3) stagnant anoxia (trauma with increased intracranial pressure); (4) histotoxic anoxia (alcohol, morphine, barbiturates); (5) neurohumeral anoxia (dehydration). No one, of course, can say which of these factors were responsible for this patient's alarming symptoms of cerebral anoxia. However, he responded to a "shotgun" reduction of the possible anoxic factors in his case.

The clinical manifestations of cerebral anoxia have a regular pattern and sequence regardless of the anoxic mechanisms involved. However, the individual effects of various anoxic mechanisms, present in any one case of craniocerebral injury, are difficult to evaluate, since there are no exact laboratory guides. Every method of therapy in craniocerebral injuries must have as its motive a reduction in the summation of anoxic effects with a consequent decrease in the mortality and morbidity of these cases.

10 Peterboro Street

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## POSTGRADUATE PROGRAM

Complete schedule of the Michigan Postgraduate Program will be published in the September Journal.

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# Pneumonia

## Clinical Diagnosis*

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■ Not many years past, the early diagnosis of pneumonia was an erudite achievement affording renown to the physician but little benefit to the patient. Now this is different. There are at present two specific methods of treatment but to be successful they must be administered in the early days of the disease. Of otherwise healthy persons diagnosed and treated on the first day, all but the exceptional case will recover. The chance of recovery decreases with each day that the disease goes unrecognized and after the fourth day specific treatment adds little to the patient's natural ability to recover. The diagnosis should be made preferably within forty-eight hours of the onset.

If the onset is abrupt the symptoms are chills, followed by fever, pain in the chest, cough with rusty sputum and dyspnea. In such case the are those of a rather severe common cold and diagnosis is obvious. More often the symptoms frequently the pneumonia follows a common cold in such manner that is it difficult to state at what time it began.

**The symptoms of the first few days are deceptive in their mildness but the physician may be on the watch for several features. One is, that while the patient insists that he has only a little cold, he is, nevertheless, unduly sick and prostrated and takes readily to bed. The other is, that an initial exhilaration may make the patient noticeably alert and unconscious of his illness.**

Even during this period the blood culture may be positive. After two to four days of these symptoms the unmistakable clinical pic-

*Read as part of a symposium on pneumonia before the Wayne County Medical Society, January 20, 1941.

ture of severe pneumonia becomes apparent, but in the meanwhile the most valuable time for treatment will have been lost, if the physician is not awake to the possibility of it.

### Physical Signs

As it is with symptoms so it is that physical signs are usually deceptive during the first few days. Consolidation is rarely detected. The early signs are suppression of respiration over one lobe, an area of râles or an area of faint bronchial intonation of the spoken voice or whisper, without bronchial breathing. Dullness is usually absent. There is no standard method of eliciting râles. In one case they are heard after cough, in another on sharp respiration and in still another on normal breathing. Pleural friction may be heard. The temperature is usually above 102.5°, which, in an adult, is seldom the case in a simple respiratory infection. The pulse is not rapid in the case of moderate severity. If it is, it indicates a fatal outcome except for specific therapy. An especially valuable early sign is elevation of the respiratory rate and this may not be obvious unless the physician sits quietly by the bedside and counts it with his watch. The physical examination must be thorough and made with care and deliberation. No consideration of inconvenience to the patient or demands upn the physician's time should be permitted to interfere with it.

I have purposely omitted from this discussion consideration of the diagnosis of the fully developed case of pneumonia since there is nothing I can add to your knowledge of it. The features that I have mentioned serve to raise a strong suspicion of pneumonia rather than to conclusively diagnose it. When the suspicion has been entertained it must be confirmed by laboratory studies.

### Laboratory Examinations

**The study of the sputum is indispensable in the diagnosis of pneumonia. It entails little effort on the part of the physician. He merely obtains a suitable receptacle in which the specimen will not quickly lose its moisture, he encourages the patient to coöperate and he then delivers the specimen to the laboratory. Hospitals should make the facilities of their laboratories available to members of their staffs for this purpose. If the sputum is to be kept some hours before delivery to the laboratory it should be placed in the ice box to prevent overgrowth by nonpathogenic organisms.**

If, in the presence of symptoms mentioned previously, pneumococci are found in the sputum, the diagnosis of pneumonia may be considered established. It is true, as Dr. Frisch will, I hope, show, that certain types of pneumococci are found in the sputum of uninfected persons and also that certain types are relatively avirulent. Nevertheless, when a matter of diagnosis is under consideration no type should be ignored. Pneumococci are found in the sputum of from 80 to 96 per cent of all cases of pneumonia. The percentage found in any series will depend upon the nature of the prevailing epidemic, the care with which the sputum is obtained and the accuracy of the laboratory. Besides confirming the diagnosis, the presence of pneumococci in the sputum indicates that chemotherapy or serotherapy should be instituted at once and it is the only means except blood culture to determine which type serum should be used.

Second to the pneumococcus the streptococcus is most commonly found in the sputum. Morphologically it may resemble the pneumococcus but it differs in that it fails to react to the Neufeld test. Its presence suggests chemotherapy, but the results may be disappointing. Pneumonia due to the staphylococcus has been in the past rapidly fatal. Both chemotherapy and serotherapy are now of value when the organism is present. The Friedländer bacillus is the cause of about 1 per cent, of pneumonias.[1] It is not related to the pneumococcus, being a member of the Tribe Escherichiæ. Nevertheless, some hope has appeared that both chemotherapy and serotherapy may be effective against it.[4] The rôle of the influenza bacillus is still to be decided and no treatment has been demonstrated as yet.

**When none of these organisms is found and the sputum contains only the common mouth bacteria, information of value still has been provided. In this case one may conclude that there is either a virus pneumonia or that some disease other than pneumonia is present. The only result to be expected**

**from chemotherapy is intoxication of the patient and there is no reason to use serum. In rare instances tubercle bacilli are found in the sputum and the case proves to be one of acute tubercular infection.**

The blood culture can be made at the bedside. We have rubber capped flasks which can be carried without chance of contamination. The inoculation is made by plunging the needle of the syringe through the cap immediately after withdrawal of the blood. Blood culture should be made when the decision to start intensive treatment has been reached, since the blood may become sterile thereafter. The blood culture, if positive, affords two items of information. The first is that the bacterial etiology is established and the second is that the case is proved to be one of desperate outlook unless it can be controlled by treatment. At times the blood culture is positive when the symptoms appear inconsequential.

The x-ray will reveal consolidation when it cannot be detected by physical signs and theoretically it is advisable in every suspected case. It will not distinguish the infecting agent nor will it differentiate pulmonary infarction from pneumonia. Even when films have been made the clinician will need to exercise his judgment. There are a certain number of minor shadows which are found in simple respiratory infection and which are puzzling to the roentgenologist. At times the film will fail to reveal consolidation even though the physical signs of it are detected, or it would seem certain that it is present. Its use is limited by its cost and restricted availability outside of hospitals.

The blood count in pneumonia shows a polymorphonuclear leukocytosis. The only exception to this is those cases in which the blood response is overwhelmed by the toxemia, and which are obviously desperately sick. In them the diagnosis rapidly becomes evident by the characteristic symptoms and signs.

### Differential Diagnosis

Because of their having somewhat similar symptoms and physical signs several conditions need be distinguished from pneumonia. Fortunately, each has one or more sharply differentiating feature. Bronchopneumonia need not be separated from lobar pneumonia for purposes of this discussion since treatment is identical in each.

In acute tubercular pneumonia the tubercle bacilli are always present in the sputum.

Either serous or purulent pleural effusion may occur abruptly. There is in them absence of tactile fremitus, a sign frequently overlooked by both students and practitioners.

Pulmonary infarction is recognized mainly by its association with other diseases, namely, arteriosclerosis, heart disease, operations, childbirth, trauma, infections and thrombo-phlebitis which may often be concealed. The sputum shows the common mouth bacteria only.

The signs of consolidation may be found in certain forms of acute rheumatic fever. The pulse is elevated far out of proportion to the fever, and pericarditis is present.

A form of pneumonia due to a virus[2] has been recognized in recent years as a consequence of bacteriological studies. In this disease all the characteristics of pneumonia are present, but the sputum shows no predominating organism and the blood culture is sterile.

It is to be expected that a pandemic of true influenza may break forth soon. In addition to respiratory symptoms, there are in the disease intense headache, backache and pains in the extremities. In severe forms collapse occurs early. There is leukopenia and the sputum is negative unless secondary invading organisms are detected.

### Conclusion

The temptation is great to administer one of the chemotherapeutic agents at the onset of any respiratory infection, and thereby avoid the laborious diagnostic studies which have been enumerated. There are several embarrassing results of such a course. In the first place, chemotherapy cannot as yet be depended upon as the sole cure for pneumonia. In the second place, accurate diagnosis is rendered difficult because, as Frisch[3] has shown, chemotherapy diminishes the numbers of pneumococci in the sputum and may thus interfere with accuracy of typing. The patient may thereby be deprived of serum therapy that he should have. Thirdly, if the patient fails to respond to this treatment within a few days there will then ensue a state of utter confusion with the physician uncertain

whether the symptoms are caused by drug or by disease and, if disease, which disease. And finally, serious toxic effects of the drug are bound to occur at best, and my own impression is that these toxic effects are more common when the drug is given in the absence of organisms susceptible to its action.

The conclusion is obvious. Spare no effort to reach a working diagnosis if possible before therapy is instituted. If chemotherapy appears imperative before the diagnosis is established, do not relax but rather intensify the diagnostic studies.

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# Eunuchism

## Treatment with Testosterone Propionate

## (Report of a Case)


**By Hazen L. Miller, M.D.**
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■ The positive and striking effect of testosterone in patients lacking testicular substance is now a conceded phenomenon. That it is also the only effective method of bringing about puberty or reëstablishing a sex life in males, who, because of anomaly or injury, have not sufficient testicular tissue, is an established endocrinological fact.[7,8,9,11]

However, there are many phases of this hormone's activity which are not clear. The effect on the development of the prostate and its hypertrophy is one of them.[1,2] The hypertrophy of the kidney which Selye found to occur in experimental animals also invites study.[3] The masculinizing effect of testosterone propionate on the female[4,5,6] should especially be kept in mind in considering the case here reported.

These considerations and the relative rarity

Fig. 1. *(Left)* General appearance when first seen. *(Right)* General appearance four months after implantation of pellets of testosterone propionate.

of such conditions prompted the writer to report this case.

The patient, apparently a male and nineteen years old, came to the Out Patient Department on August 1, 1939, because of failure of sexual development and blindness of the left eye. The blindness was due to an injury seven years previously. He had never experienced sexual desire, erections or ejaculations.

About five year before, an operation for cryptorchidism was performed at Toronto General Hospital. The condition found is described in the following report:

"This unfortunate boy of fifteen came to the hospital for investigation and treatment of cryptorchidism. Examination showed the penis to be infantile in type—the scrotum to be small and empty; there was no growth of pubic hair, or in fact anywhere else on the body. A careful palpation in the region of the internal ring and inside was suggestive of a small mass which was taken to be the testis. Exploration was carried out and on both sides a similar finding was

encountered. At the internal ring was an oval mass about the size of an almond which felt like a testis, but on being visualized looked like a lymph gland. Quick section was done and it was reported lymph gland. Careful examination revealed no sign of a

Fig. 2. *(Left)* Genitalia when first seen. *(Right)* Genitalia four months after implantation of pellets of testosterone propionate.

testis. Palpation in the extraperitoneal pelvis gave no sign of a uterus or ovary. The wounds were closed; the conjoined tendon being sutured to Poupart's. Pre-operative examination revealed no sign of an ectopic testis. Pathological report on the tissue was 'chronic lymphadenitis.'"

This individual had the appearance of a girl dressed in boy's clothes. He was 5 feet, 9½ inches in height and weighed 122 pounds. His manner was languid and he seemed to lack energy. His formal education was carried only through the third grade because of his father's peripatetic occupation, but he seemed quite well informed for his age and answered questions promptly and intelligently. He evinced an interest in girls but has never attempted any sexual approach, giving as his reason, "I would look foolish attempting anything with what I have." He has tried masturbating with a resultant slight engorgement of the penis producing about a 1 cm. increase in length. He appears to be interested in boyish pursuits, plays football and makes model airplanes.

The father and mother and two younger brothers are living and well and apparently normal.

On physical examination this patient was of the slender stature above described with a sexless configuration of the body, tending to the female type as shown in Figure 1A. The shoulders were small and the musculature was poor. There was no suggestion of mammary gland, and no other indication of ovarian function.

There was a scar on the left cornea. On the face there was little or no hair and no axillary or pubic hair. The voice was soprano in pitch.

There were bilateral inguinal scars. Nothing suggestive of a testicle was palpable either there or in the scrotum, except for an indefinite thickening at the right external ring. The scrotal sac was undeveloped and the penis infantile, measuring about 3 cm. in length and 1 cm. in thickness with a very marked narrowing of the meatus. Rectal examination revealed no evidence of a prostate gland; no secretion could be expressed from the urethra.

The extremities were negative except for extraordinarily long and prehensile fingers and toes.

### Laboratory Findings

Urine: Straw color, alkaline. Albumin, negative. Sugar, negative. Sediment, occasional WBC. Blood: Hgl. 90 per cent, RBC 4,640,000, WBC 7,200, filament 60 per cent, non-filament 8 per cent, lymphocytes 30 per cent, endocytes 2 per cent. Blood N.P.N. 29 mg. per 100 c.c. blood. Blood sugar 115 mg. per 100 c.c. blood. Blood Kahn negative. An Ascheim Zondek test was not done.

Blood pressure was 120 systolic and 60 diastolic.

On October 5 a meatotomy was done increasing the caliber of the meatus from 18 F to 24 F. However pyelographic studies of the upper urinary tract were carried out by the excretory method on October 28 because of the yet infantile penis. These pyelograms (Fig. 2A) show actively secreting kidneys, but are rather small for the patient's age and size.

### Treatment

This patient was first treated with Antuitrin S throughout the month of August, 1939, receiving 500 rat units intramuscularly every two or three days to a total of 7,000 rat units. There was no apparent change in his condition.

He was then given testosterone propionate, 25 mg. intramuscularly, receiving five injections the first week and two injections a week

after that for five months. He received a total of forty-six injections of 25 mg. each, thus consuming 1,150 mg. of this expensive preparation in less than half a year.

Fig. 3. *(Left)* Excretory pyelogram before testosterone propionate therapy. *(Right)* Excretory pyelogram one year after commencing testosterone therapy.

The effects were instantaneous, sustained and gratifying. The penis, during the first week, became somewhat sore without any pleasurable sensation and there was considerable edema of the prepuce and scrotum. However, this soreness and edema disappeared in a week and the penis proceeded to increase in size in its flaccid state from the original length of 3 cm. to 4 cm. at the fourth week, 5 cm. at the sixth week and at the conclusion of his injections had attained the nearly normal size of 7 cm. All measurements were made from the symphysis to the tip of the glans. At first there was almost constant penile engorgement and erections occurred several times daily, lasting about a quarter of an hour. During this acute response a small amount of blood was once noted coming from the urethra.

Approximately one month after the beginning of his injections of testosterone propionate, the patient observed that he had experienced "sexual desire since taking the shots; before it never bothered me." Also about this time he reported that a viscous substance came from the urethra following defecation; but he did not have a nocturnal emission with discharge of a starchy substance resembling semen until the seventh week.

Within a week of the beginning of his replacement therapy he felt "more peppy," whereas he had felt "groggy" before. This increase in energy was soon accompanied by a visible increase in musculature. In one month the patient gained from 122 pounds to 137 pounds. In two weeks more he weighed 142½ pounds and at present weighs 149 pounds. This immediate gain is interesting in view of the work of Thorn and Emerson on the production of edema by gonadal and adrenal cortical hormones.[10] During the past year the patient has increased in height from 5 feet, 9½ inches to 6 feet.

A growth of pubic hair became noticeable in three weeks and soon afterward a beard and axillary hair. It was nearly two months, however, before this hair growth became as prominent as that of a boy at the beginning of puberty. At about this time his voice began to become deeper and "crack" occasionally.

Early in his treatment the patient observed that his breasts were "developing." On examination there was found to be a slight swelling, induration and tenderness in the right nipple region, and later the same on the left. Nothing further was ever evident and at present there is nothing resembling a female breast.

As stated previously, at the end of five months the supply of testosterone propionate was exhausted and the patient's treatment lapsed, but without any apparent regression on his part during a three-month period. Through the courtesy of the Schering Corporation, pellets suitable for implantation were then obtained, and implanted in the left axillary region by Dr. C. J. Barone, an associate. Two pellets of 150 mg. each were used.

There was an immediate renaissance in sexual activity. Prolonged erections occurred about five times daily, and frequent emissions were noted for some time. He reports now, eight months after implantation, that these emissions do not occur and the erections are diminishing. The voice continues to deepen and the pubic and axillary hair to thicken. There is fairly well developed facial hair, but no hair on the chest. The penis is quite well developed; flaccid, it measures 7 cm. in length and 3 cm. in diameter; when erect, the length is 12 cm. and the diameter between 4 and 5 cm. The denser tissue suggesting a small, rather amorphous testicle palpable at the right external ring, is still present and perhaps slightly larger. A small, firm prostate is palpable by rectum and is not tender. No secretion could be expressed from this on repeated attempts. However, the secretion discharged from the meatus upon manually induced ejaculation, has the gross appearance of prostatic fluid, not semen, and microscopically shows a moderate concentration of lipoid globules and no spermatozoa.

Excretory pyelograms were made on October 28, 1939, at the beginning of his treatment and again in December, 1940. These proposed to show clinically the hypertrophic influence of testosterone propionate on the kidney as demonstrated by Selye[7] experimentally. As will be noted (Fig. 2A-B), there is no very marked change in the size of the kidney in this patient after rather prolonged therapeutic dosage.

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# Uterine Inertia in the First Stage of Labor*


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■ OF all the causes of dystocia or difficult labor, uterine inertia, with its weak and insufficient contractions, is perhaps the most frequent and troublesome. As little is known about its etiology, the condition is so unpredictable as to make prevention impossible for the most part. For the same reason, there is as yet no direct and certain remedy. Treatment must therefore depend largely on a careful consideration of possible complications and dangers, and their best management. Here, as in other conditions, knowledge accumulates and opinions change with experience, and so another review of an old subject may be justifiable.

As an example of a more or less personal opinion, it would seem to me that the problem of uterine inertia particularly concerns the first stage of labor, since it is generally agreed that persistent delay in progress after full dilatation of the cervix offers a clear-cut indication for feasible delivery by mid or low

*From Herman Kiefer Hospital and the Division of Obstetrics and Gynecology, Wayne University. Presented before the Kalamazoo Academy of Medicine, March 18, 1941.

forceps, or extraction in breech presentations. Again, the customary division of inertia into primary and secondary appears to have little practical importance as the problems to be solved are essentially the same in either event. Consequently, this discussion will apply almost exclusively to uterine inertia in the first stage of labor, and without regard to its time of onset. Also, only incidental mention will be made of other causes of prolonged labor, though it is recognized that they often play a part along with inertia.

### Incidence

The incidence of uterine inertia varies somewhat with the types of patients. Those in their first labors are more likely to be affected than are multiparas, although the latter are certainly not exempt from the trouble. In some reports, occurrence is given as high as 10 per cent, but in the general run of obstetrical patients it probably is actually hardly one-half that figure—especially if the customary arbitrary duration of thirty hours or over is accepted as the criterion of prolonged labor. Moreover, care must be taken not to include cases with vague pains but not definitely in labor. With all proper statistical safeguards, the incidence is yet of considerable practical significance for the obstetrician.

### Etiology

The etiology of this condition is most obscure—as should be expected when it is remembered that we have little more than speculative evidence regarding the cause of onset and continuation of labor pains. As noted before, women in their first labors are more subject to the trouble, and this is said to be especially true with elderly primiparas. Certain other predisposing conditions are often mentioned, such as mild bicornuate or arcuate uterus; overdistention from multiple pregnancy, hydramnios, or large child; uterine fibroids; pelvic adhesions; and unusual fear or other emotional upsets. These factors are so far from constant in their action, however, as to offer little help in predicting inertia. Advanced disease, general debility, and such are unimportant. In fact, women in poor condition from tuberculosis, cardiac disease, and acute infections, for example, tend to have rather easy labors. Premature rupture of the membranes is now generally believed to be more often a result than a cause. Contracted pelvis and some abnormal presentations have, unfortunately, a high incidence of complicating inertia, but from recent studies at Herman Kiefer and Harper Hospitals we doubt that a like impression regarding breech[7] and posterior occiput[9] presentations can be verified. Considerable attention to body build has yielded only generalizations of no great practical value. The etiology, then, of this important obstetrical condition is essentially unknown. Furthermore, there are so many exceptions to any rules so far laid down that the presence or absence of any probable or suspected causal factors gives little certainty regarding the possible appearance or non-appearance of uterine inertia in any given case.

### Complications and Their Treatment

Where the cause of a condition is largely guesswork, prevention is likely to be of the same order. Theoretically, the endocrines might have some bearing on the problem, but results with the use of all, even ovarian follicular hormone, which seemed most promising of any, have been equivocal and unconvincing. Of some interest, however, has been the recent report by Wadlow[11] and a similar one by Pomerance and Daichman.[5] Both of these small series of women, kept on a diet greatly restricted in salt, showed averages for the duration of labor appreciably shorter than those usually accepted. The régime should be harmless, though probably hard to maintain, and no doubt further reports will soon appear by which we may judge the efficacy of the treatment. As indicated before, efforts in the prenatal period directed towards improving the general health may be futile in the prevention of uterine inertia but would at least give better resistance should this, or any other, complication arise.

*Infection.*—If we grant, then, that uterine inertia in labor is largely unpreventable, we should realize the hazards of the complication and be prepared to combat them as well as can be done. One definite danger is intrapartum infection, with the subsequent increased incidence of puerperal infection for

the mother, and high fetal mortality. As definitely shown (by Harris and Brown,[3] and by Siddall,[8] among many others), the intrapartum infection rate increases directly with the duration of labor, and this is especially the case if the membranes are ruptured. Certainly, this danger emphasizes the need of meticulous aseptic technic and the limitation of vaginal, and even rectal, examinations during labor and late in pregnancy. Efforts at more positive treatment, notably by H. W. Mayes,[4] in which not only is the vulval site prepared in the usual way but also an antiseptic is instilled into the vagina from time to time during labor, has given good results in the hands of some. Others have found it of little use, and DeLee[1] reports an actual increase of infection with the method. I believe that this technic is probably harmless but as yet am not entirely convinced of its efficacy.

*Exhaustion.*—The other major danger is physical exhaustion—sooner or later, if labor lasts long enough, jeopardizing the mother's life undoubtedly, and probably the child's also.

Again, it may not be amiss to point out that a diagnosis of exhaustion is not to be based on the statements of the woman but on a rising pulse rate and other definite signs of beginning collapse. Recognizing that the treatment of frank exhaustion in labor is far from satisfactory, we are wise to anticipate and institute early measures aimed at prevention, or more exactly, postponement, of the danger.

The procedures for treatment or postponement of exhaustion fall, for the most part, into two groups. First is the promotion of rest and sleep; and here it is well to remember that though morphine gives the most perfect rest, it also is prone to diminish the already weak contractions. Barbiturates, with perhaps small amounts of scopolamine, have less effect on the pains and are often for this reason chosen though there is the risk of inducing excitement rather than sedation in an occasional patient. An additional small dose of morphine will usually eliminate this objectionable reaction. There seems to be no doubt of the appreciably better results to be obtained in these cases by emphasis on the use of analgesic drugs rather freely.

Also, of great importance in forestalling exhaustion in prolonged labor, is the matter of food and water. Digestion is impaired during labor, it is true, but small amounts of easily digestible food at frequent intervals are well handled and help to keep up strength and morale. Of even more consequence is attention to an adequate intake of water. Many patients in labor require urging to take anything by mouth, and where there is vomiting and with the use of analgesia, dehydration may become a real problem. Pride and Reinberger[6] have demonstrated a high frequency of genuine, and sometimes dangerous, acidosis in long labors. Incidentally, they attributed some of the acidosis to the production of lactic acid from muscular activity and, furthermore, found that analgesia limited this, and hence the acidosis, presumably by promoting rest and quiet. There would seem to be good reason back of the common custom of giving glucose solution intravenously (say, 1000 cubic centimeters of a 5 per cent solution every 12 hours) to patients long in labor in order to assure them a fair water intake as well as some readily usable food.

*Stimulation of Pains.*—Inasmuch as this condition is one of weak and insufficient pains, it is only natural that efforts should be directed towards correction of the trouble by stimulation of uterine contractions. The lack of anything but speculative knowledge as to the initiating impulse causing labor pains has been an insurmountable difficulty in treating the actual cause. Trial of the ovarian follicular hormone has been disappointing[12] as noted before. On the theory that increased pressure in the uterus stimulates pains, a tight abdominal binder has been recommended, and it might well have some effect if it were not generally too uncomfortable for use. Others encourage a patient to remain upright or walking so that gravity will bring the presenting part against the cervix, but such activity is of questionable benefit and, if persisted in, contributes to exhaustion.

Experience has shown that digital stripping away of the membranes from the lower uterine segment, or perhaps the stretching of the cervix with such manipulation, sometimes produces better pains. If vaginal exploration is

already indicated to rule out malposition or for other reasons, there should be no contra-indication to a trial of this procedure. Artificial rupture of the membranes is more often successful but is wisely reserved for patients with considerable dilatation of the cervix and in whom, in case of failure and the consequent increased danger of infection, operative delivery could be reasonably practicable. The hydrostatic bag introduced through the cervix is a fairly efficient stimulator and dilator but carries with it too much danger of infection and prolapse of the umbilical cord for routine use.

**Direct stimulation of pains by oxytocic substances has been the subject of much controversy. Castor oil and quinine either in combination or singly, are old and much used remedies, though admittedly uncertain in their action. In fact, there are some who question any degree of efficacy for either drug. Moreover, evidence has been advanced to show that quinine may cause deafness of the child or even its death. However, such dangers can be only very slight at the most, and the preponderance of clinical opinion regards both as sufficiently helpful to justify a trial in many cases. Perhaps some of the confusion has arisen because the effect is seldom immediate, but is evidenced after the lapse of 4 to 6 hours. Paradoxical as it may seem, these drugs, either alone or together, may be given with morphine, since the stimulating action of the former comes into play as the sedative and recuperative effect of the latter wears off.**

Extracts of the posterior pituitary gland were at first highly recommended for use in these cases, and they are undoubtedly efficient stimulators. But, it was soon learned that such serious accidents as rupture of the uterus and death of the child might result, and there came about a general condemnation of the procedure. Williams[13] says, "—its administration is reprehensible during the first stage of labor." Titus[10] agrees with this, without reservation. On the other hand, Faber and Mussey,[2] and a few others, have maintained that cautious use of the substance may be defensible where operative termination of labor would otherwise be necessary. Some of the staff members of Herman Kiefer and Harper Hospitals have long held that though large doses of these substances are highly dangerous, this fact does not necessarily mean that *small* quantities should be so harmful as to be totally contra-indicated. At Herman Kiefer an experimental study[9] was made, and the results can be summarized as follows:

The sixty-two cases were at term, with viable babies, and had been in definite labor for thirty hours or more, the dystocia being due to uterine inertia as the only cause. Either pituitary extract or a solution of the oxytocic fraction (pitocin) was given at intervals of twenty to thirty minutes, beginning with 1, 2, or 3 minims and increasing a minim a dose to a maximum of 5 minims. Whenever good stimulation occurred during a course, administration was, of course, discontinued at that point. In some instances the course was repeated after a lapse of several hours, when the first had been without effect. Among the sixty-two cases there were forty-two with efficient and lasting stimulation of pains causing satisfactory completion of the first stage of labor. Essentially the same results were obtained for primiparas and multiparas. In the twenty classed as failures, there also was apparently some effect in the majority, as only three required operative intervention before full dilatation of the cervix. In these sixty-two very difficult cases there were only four stillbirths, and of these not more than one could possibly be ascribed to the use of pituitary extract. There were no neonatal deaths, and the fifty-eight babies born alive showed no evidence of injury. One maternal death occurred following operative interference *after* full dilatation of the cervix and was in no way due to stimulation of the uterus. We were convinced, however, that the method is not free of danger as there was one instance of tetanic contraction of the uterus after an initial 2 minim dose—fortunately relieved by ether anesthesia and without detectable injury to mother or child. Because of this experience, we recommended a first dose of not more than one minim to test out the reactivity of the uterine musculature.

The foregoing is intended in no way as a recommendation for the indiscriminate employment of pituitary extract in labor. There is always some risk with its use, and large doses are very dangerous. However, in very difficult cases of uterine inertia with operative intervention becoming inevitable, it does seem that a careful trial of pituitary extract should be considered as the lesser hazard.

### Operative Intervention

In the event that all treatment has failed and the woman with an incompletely dilated cervix begins to show signs of exhaustion and infection, operative interference becomes imperative to forestall a tragedy. Cesarean section is usually out of the question because of the risk of infection. Experience has shown that even the formerly recommended low cervical or the extraperitoneal technic, though affording some protection, are yet associated with too high a mortality after long labor. An exception may sometimes be made where future child-bearing is not desirable or may be sacrificed, and cesarean section can be followed by removal of the uterus. This is necessarily a rare situation since the majority of these women are in their first labors.

When the cervix is half or more dilated, completion of the dilatation is to be accomplished and the child delivered by forceps or version and extraction, depending on which is dictated by the circumstances. With less than 5 centimeters dilatation, it is generally wise to insert a hydrostatic bag for at least a trial at promoting some progress before attempting delivery. For operative enlargement of the cervix, direct incision according to Dührssen has largely supplanted so-called manual dilatation, which in fact was not dilatation but rather manual tearing. Cutting is much quicker and, moreover, has the distinct advantage of permitting the placing of the incisions in the safest directions. Since the operation is described in every textbook, little need be said on the technic.

**It has been stated, however, and I believe the statement is true and worth repeating, that the commonest mistake in connection with this operation is its posponement until too late. Its well known formidableness leads too often to ill-advised delay; and finally when the attempt is made, the patient is in the last stages of exhaustion.**

Another and frequent error is found in insufficient incisions. Traction on the fetus, then, is very likely to result in sudden and dangerous extension well up into the uterus.

Finally, a word may be said in regard to one more danger, namely, postpartum hemorrhage. Uterine inertia is often followed by uterine atony, and after successful delivery, the patient's life may be again jeopardized by profuse bleeding. Treatment, of course, is as usual for postpartum hemorrhage, but anticipation should permit more prompt institution of the necessary measures.

### Summary

Uterine inertia is a common cause of dystocia, especially in first labors though multiparas are not exempt from the trouble. In the second stage of labor, operative delivery is usually feasible; but prolonged first stage due to weak pains is apt to be difficult to treat and may be dangerous for mother and child. The actual etiology of uterine inertia is unknown, and moreover the usually accepted predisposing factors are so variable in their effect as to be of little value in predicting the condition for any given case. Consequently, attempts at prevention are mostly futile, though the recently suggested salt-poor diet may prove to be of some help. The chief dangers associated with the prolonged labor of uterine inertia are infection and exhaustion, and treatment for these is outlined. Direct stimulation of uterine contractions has been widely condemned as hazardous but at times may be justifiable in order to avoid greater risks. Results are given for an experimental series of these cases treated by careful administration of pituitary extract. In some instances all treatment fails; and with the approach of danger, operative intervention becomes necessary, and this should not be postponed until too late. Cesarean section is usually contra-indicated. If the cervix is less than half dilated, the dilating effect of a hydrostatic bag may be tried. But, when 5 centimeters or more dilatation has been attained, the general indication is for ample incision of the cervix and extraction of the child by forceps, breech extraction, or version and extraction, as the circumstances dictate. Postpartum hemorrhage due to uterine atony often follows uterine inertia.

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955 Fisher Bldg.

———MSMS———

## NO RETREAT FOR MEDICINE

The flame-lit skies of bombed British towns can sometimes be seen at night from countries across the Channel. America, too, hears the rumble of the War God's chariot and his hot breath is felt by each of us. This is not strange when every paper in the land carries banner headlines on war and on our defense measures.

Reports are conflicting. The losses of the combatants fluctuate like the stock market and figures are high or low, depending on which side is telling the story. Our thoughts are pulled this way and that by propaganda. It is true that our sympathies lie with the democratic nations, but do not make the mistake of believing that therefore the dictator powers can have no influence over our destiny. Propaganda, we are told, is the most powerful weapon that can be wielded. It sneaks and crawls into the very mind of man or marches in to the tune of martial music. The democratic nations reach us by arousing sympathy; Hitler and his unholy brethren inspire us with terror and try to create the impression that they are invincible. Many are prone to fall under the hypnotic sway of such suggestions and might then assume that a struggle is not even worth while.

Countless old legends are woven around a theme similar to the story of Achilles' heel. It is comforting to remember that there is always a weak point that can be reached, and when poise is substituted for hysteria we know that liberty must eventually conquer.

In a life-and-death struggle such as that now being waged by England, activities must be restricted to the bare necessities. Research goes on feverishly but in the destructive field of war machinery. Medicine goes on too, and we are even told of great discoveries in plastic surgery, wound therapy, and so forth, which evolved during or as a direct result of the last World War.

These too, however, must be considered as children of necessity. The greatest part of medicine has to be laid aside to be dusted off only after the peace treaty has been signed.

In the meantime our American physicians must carry a burden of responsibility not only for themselves but for those of their profession who are homeless and persecuted, for the harassed and overworked in the war zone, for the dead, and for that vast uncounted army of young men who would have become healers if fate had not called upon them to become killers.

We must not permit the fire glow from England to cause panic which will rout the ranks of medicine. We must continue to perform our everyday tasks with as much serenity as possible. We must not discard research as useless in a mad world, for the day will come to aid those who are torn and bleeding so that when the first of destruction dies away, they may lift high the bright flame of liberty that burns undying in their hearts.—*Pennsylvania Medical Journal,* Feb., 1941.

———MSMS———

## NURSING EDUCATION VS. NURSING CARE

From a discussion at the midwinter session of the Council of our Association, it is clear that the problem of nursing care is constantly growing in seriousness and that unless remedial measures are promptly instituted there is danger of a complete breakdown of this indispensable service to the sick. Hospitals throughout the state are threatened with serious handicaps in their nursing care. The problem is particularly acute for smaller institutions in the outlying districts.

The present dilemma may be traced to a number of factors. The public health activities, the Red Cross, the Visiting Nurse Associations, the school health services, all have already absorbed, and are continuing to draw, goodly numbers of graduates. The salaries, the hours, and the nature of service offered by these positions are obviously more attractive than are the duties connected with bedside routine in a home or in a hospital.

The greatest contributing factor, however, must be sought in deeper territory. The history of nursing education in this country runs closely parallel to that of medical education with this exception. A generation ago there were 170 medical colleges in the United States. As to training schools, well, there were almost as many as there were hospitals. In Nebraska too, until the reform began it was unthinkable for a respectable hospital to deprive itself of a nurses' training school. This statement is not made in a spirit of sarcasm. Indeed, many graduates from these now extinct training schools are today rendering excellent bedside care to the people of our commonwealth.

With the change in trends of education in nursing, the smaller schools have disappeared. Now only the large and well endowed hospitals can keep up with the rigid requirements and the academic equipment necessary for an approved training school. The effort to improve the standards of any profession deserves praise, and as physicians we express our enthusiasm over the attempt. In fact, we have helped in no small measure to expand the curriculum.

"The recently graduated nurse is more interested in an executive or administrative job than in actual nursing." This statement was made in full sincerity by a member of the Council, who for many years has operated a well equipped but small hospital in the state. The sentiment seemed to be general and practically unanimous that the modern R.N. considers herself too well trained to administer "hypos" and enemas.

It is not within the scope of this editorial to suggest a solution to the problem. That the situation is urgent the leaders in nursing education undoubtedly appreciate. It is ardently hoped that our committees appointed to study the dilemma will bring in some tangible information that may promptly be utilized as a basis for betterment of nursing care in Nebraska. —Editorial from *Nebraska State Medical Journal,* March, 1941.

# EDITORIAL

## MATURE JUDGMENT NEEDED

■ UNLESS intelligent judgment is used there will always be difficulty in determining the dividing lines between public health, preventive medicine and curative medicine. Probably every curative procedure in medicine could be judged by some to be a public health or a preventive measure and tacitly the function of the Department of Health.

A number of instances have occurred recently which indicate a broadening of this viewpoint in defining public health and preventive measures and the part which should be played in them by the group of health officers.

The Department of Health maintains a mobile x-ray unit for the purpose of surveying certain districts in which the incidence of tuberculosis is a major problem. Primarily, it was meant for use in those districts in which x-ray facilities were lacking. In two counties (which *are* adequately equipped roentgenographically) the use of this unit has been offered to manufacturing plants at a cost below that which could be met by private roentgenologists. In each of these factories the county health officer has felt a need for such a survey existed. In one county the medical profession refused to place its endorsement upon this use and an appeal was taken to The Council of the Michigan State Medical Society. The decision was referred back to the county medical society as being entirely within its own province since the Department of Health had stipulated that the consent of the local profession must be obtained before the unit was used for this purpose. In the other county the profession took no formal action but a large majority of the members individually offered no objections.

It seems to be the practice for the health officer to initiate this type of survey and since the survey is usually discussed with the industrialist before consulting the medical profession it puts the onus of the decision on the practicing physician. In the smaller counties this is embarrassing to some members.

**When the health officer has such a program to suggest, the county medical society should be consulted first and then the proposal should be carefully weighed and studied, not alone from the immediate effects upon the doctor himself, but upon the real need, from the standpoint of preserving the health of the community, and also from the standpoint of the preservation of private enterprise, which is the foundation of the private practice of medicine.**

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## A GREAT MEETING

■ THE MICHIGAN State Medical Society will hold its Seventy-sixth Annual Convention at Grand Rapids, September 16, 17, 18, and 19.

**Thirty out-of-state speakers, who are recognized leaders of their specialties, over a hundred exhibits, and a sincere welcome await you at Grand Rapids.**

This second largest city of Michigan has been most coöperative in caring for the crowds which annually attend this instructive and entertaining meeting. Its auditorium facilities are unsurpassed and the hotels have been most considerate of the desires and needs of the two thousand doctors of medicine who attend. The numbers of members who were disappointed by the lack of proper facilities at Detroit last year will be more than gratified by the entirely different attitude of the hotels in this year's selected city. There are several hotels in Grand Rapids comparable to those in the very large metropolitan areas. The auditorium is connected with one of the hotels and furnishes the best arrangement for exhibits which can be found in the state.

Any description of Grand Rapids would be very incomplete were one to omit mention of the many beautiful parks in and about the city. But chiefly is the city provided with wonderful facilities for golf. There are no less than eleven splendid golf courses in and around Grand Rapids. In addition to the private country clubs such as Cascade Hills, Highlands, Kent, and Blithefield there are a number of municipal and other public links.

**If you have not already made your reservation for a room, do so immediately.**

## Postgraduate Education in Michigan

# President's Page

A PHYSICIAN'S education is never done. It is the penalty of medical leadership. Since every doctor of medicine aspires to professional superiority, voluntary postgraduate study has become a stern but commonplace requisite of good practice today.

The Michigan State Medical Society, through its Postgraduate Medical Education Committee, has blazed a progressive trail in the training of Michigan's general practitioners. The high percentage of attendance at its eight extramural, as well as its resident centers, speaks well for the medical competence of doctors of medicine in this state.

In its constant efforts to improve and expand its excellent program, the state society should give favorable consideration to a concentrated program at some convenient center in the Upper Peninsula. More opportunity for continuation study in that vast area is indicated; the several hundred practitioners in the nine Upper Peninsula county medical societies are most desirous that an annual postgraduate day be inaugurated.

When this center is established, the Michigan State Medical Society will have covered the entire state with a postgraduate program superior in quality and most modern in execution.

President, Michigan State Medical Society

# Michigan State Medical Society

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1917— Andrew P. Biddle, Detroit
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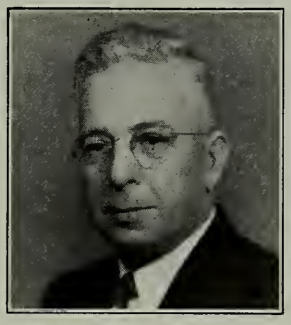
1935— Grover C. Penberthy, Detroit
1936— Henry E. Perry, Newberry
1937— Henry Cook, Flint
1938— Henry A. Luce, Detroit
1939— Burton R. Corbus, Grand Rapids

*Deceased.

# THE 76TH ANNUAL MEETING
## GRAND RAPIDS — 1941



P. R. URMSTON, M.D.
Bay City
*President*

A. S. BRUNK, M.D.
Detroit
*Chairman of The Council*

O. D. STRYKER, M.D.
Fremont
*Speaker of House of Delegates*

### OFFICIAL CALL

THE Michigan State Medical Society will convene in Annual Session in Grand Rapids, Michigan, on September 16, 17, 18, 19, 1941. The provisions of the Constitution and By-laws and the Official Program will govern the deliberations.

P. R. URMSTON, M.D.,
President

A. S. BRUNK, M.D.,
Chairman of The Council

O. D. STRYKER, M.D.,
Speaker

Attest:

L. FERNALD FOSTER, M.D.,
Secretary

L. FERNALD FOSTER, M.D.
Bay City
*Secretary*

WM. A. HYLAND, M.D.
Grand Rapids
*Treasurer*

H. R. CARSTENS, M.D.
Detroit
*President-Elect*

# OUTLINE OF GENERAL ASSEMBLY PROGRAM

## Seventy-sixth Annual Meeting, Michigan State Medical Society

## Grand Rapids—September 17, 18, 19, 1941

| | Wednesday, September 17 | Thursday, September 18 | Friday, September 19 |
|---|---|---|---|
| *A. M.*<br>9:30 to 10:00 | Medicine<br>Russell L. Cecil, M.D.<br>New York City | Obstetrics (Maternal Health)<br>James R. McCord, M.D.<br>Atlanta, Georgia | ON THE SEVEN SECTION PROGRAMS<br>General Medicine<br>A. R. Barnes, M.D.<br>Rochester, Minn<br>Surgery<br>Harry E. Mock, M.D.<br>Chicago<br>Obstetrics & Gynecology<br>Richard TeLinde, M.D.<br>Baltimore<br>Ophthalmology & Otolaryngology<br>Samuel Iglauer, M.D.<br>Cincinnati<br>Pediatrics<br>Harold K. Faber, M.D.<br>San Francisco<br>Dermatology & Syphilology<br>S. Wm. Becker, M.D.<br>Chicago<br>Radiology, Pathology, Anesthesia<br>Bernard H. Nichols, M.D.<br>Cleveland |
| 10:00 to 10:30 | Surgery<br>Elliott C. Cutler, M.D.<br>Boston | Medicine (Tuberculosis)<br>Charles E. Lyght, M.D.<br>Northfield, Minn. | |
| 10:30 to 11:00 | VIEW EXHIBITS | VIEW EXHIBITS | |
| 11:00 to 11:30 | Syphilology<br>Francis E. Senear, M.D.<br>Chicago | Medicine<br>V. P. Sydenstricker, M.D.<br>Augusta, Georgia | |
| 11:30 to 12:00 | Gynecology<br>George W. Kosmak, M.D.<br>New York City | Pediatrics<br>James Gamble, M.D.<br>Boston | |
| *P. M.*<br>12:00 to 12:30 | Medicine (Mental Hygiene)<br>Lawrence Kolb, M.D.<br>Washington, D. C. | Obstetrics<br>Wm. E. Caldwell, M.D.<br>New York City | |
| 12:30 to 1:30 | LUNCHEON<br>VIEW EXHIBITS | LUNCHEON<br>VIEW EXHIBITS | LUNCHEON<br>VIEW EXHIBITS |
| 1:30 to 2:00 | Anesthesia<br>Wesley Bourne, M.D.<br>Montreal | Ophthalmology<br>Alfred Cowan, M.D.<br>Philadelphia | Otolaryngology<br>D. E. Staunton Wishart, M.D.<br>Toronto |
| 2:00 to 2:30 | Surgery (Indus. Health)<br>A. J. Lanza, M.D.<br>New York City | Pathology<br>Shields Warren, M.D.<br>Boston | Dermatology<br>Carroll S. Wright, M.D.<br>Philadelphia |
| 2:30 to 3:00 | VIEW EXHIBITS | VIEW EXHIBITS | VIEW EXHIBITS |
| 3:00 to 3:30 | Pediatrics<br>Henry Poncher, M.D.<br>Chicago | Medicine<br>Chester S. Keefer, M.D.<br>Boston | Pediatrics (Child Welfare)<br>3:00 to 3:30<br>Borden S. Veeder, M.D.<br>St. Louis, Missouri |
| 3:30 to 4:30 | DISCUSSION CONFERENCES WITH GUEST ESSAYISTS | DISCUSSION CONFERENCES WITH GUEST ESSAYISTS | 3:00 to 4:00<br>Medicine<br>C. A. Doan, M.D.<br>Columbus<br>4:00 to 4:30<br>Surgery<br>Owen H. Wangensteen, M.D.<br>Minneapolis |
| 8:30 to 10:00 | President's Night<br>Biddle Oration<br>in Hotel Ballroom<br>Speaker:<br>Alphonse Schwitalla, S.J.<br>Dancing | Smoker<br>in Pantlind Hotel Ballroom | END OF CONVENTION |

# PRELIMINARY
# PROGRAM of GENERAL ASSEMBLIES

## WEDNESDAY MORNING
## September 17, 1941

### *First General Assembly*

**Black and Silver Ballroom—Civic Auditorium**

A. S. Brunk, M.D., Presiding

L. Fernald Foster, M.D., and Gordon B. Myers, M.D., Secretaries

**A. M.**

**9:30 "Arthritis—A Curable Disease?"**

Russell L. Cecil, M.D., New York City

Russell L. Cecil

*B.A., Princeton University, 1902; M.D. Medical College of Virginia, 1906; Sc.D., Medical College of Virginia, 1928. Entered Army in June, 1917; served as Director of Laboratories at Camp Upton, N. Y., and Camp Wheeler, Georgia; served at Army Medical School and appointed Head of Commission for Study of Pneumonia by Surgeon General, 1917 to 1919. He is now Professor of Clinical Medicine, Cornell University Medical School; Professor of Medicine, Polyclinic Medical School and Hospital; he also holds several other important appointments. Doctor Cecil has published several works on the subjects of pneumonia, arthritis and rheumatism.*

The curability of arthritis varies with the type. Some of the specific forms, such as gonococcal or meningococcal arthritis, are readily curable by sulphonamide therapy. The arthritis of rheumatic fever usually yields promptly to salicylates, but unfortunately the cardiac injury persists. Subacute infectious arthritis often disappears permanently after a focus of infection has been removed. Rheumatoid arthritis is an extremely difficult disease to cure, though a certain small percentage of these patients do make a permanent and complete recovery. More often the life history of the disease is characterized by "ups and downs," which go on indefinitely, with periods of remission being followed by periods of exacerbation. Gold salts offer more promise of permanent relief in the treatment of rheumatoid arthritis than any other remedy so far described.

Osteo-arthritis is also a chronic persistent ailment which may yield readily to rest and physiotherapy, but has a strong tendency to return when the joints are overused. Gouty arthritis starts with acute attacks from which the patient recovers completely when treated promptly with colchicine. Chronic gouty arthritis does not yield so quickly to remedial agents.

**Papers Will Begin and End on Time!**

Believing there is nothing which makes a scientific meeting more attractive than by-the-clock promptness and regularity, all meetings will open exactly on time, all speakers will be required to begin their papers exactly on time, and to close exactly on time, in accordance with the schedule in the program. All who attend the meeting, therefore, are requested to assist in attaining this end by noting the schedule carefully and being in attendance accordingly. Any member who arrives five minutes late to hear any particular paper will miss exactly five minutes of that paper!

**10:00 "Acute Appendicitis—A Twenty-five Year Study"**

Elliott C. Cutler, M.D., Boston
(Stanley O. Hoerr, M.D., Boston, Associate in Study)

Elliott C. Cutler

*A.B., Harvard, 1909; M.D., Harvard Medical School, 1913; Honorary Doctorate, University of Strasbourg, 1938. Served in World War as Major, Medical Corps; Lt. Colonel, Medical Corps Reserve, since 1924; decorated with Distinguished Service Medal. Chairman, Department of Surgery, and Director of Laboratory of Surgical Research, Harvard, 1922-24; Professor of Surgery, Western Reserve University School of Medicine, 1924-32; Consulting Surgeon, New England Peabody Home for Crippled Children, 1932 to present; Moseley Professor of Surgery, Harvard, 1932 to present; Surgeon-in-Chief, Peter Bent Brigham Hospital. Doctor Cutler is a member of many medical and social organizations.*

The deaths from acute appendicitis occur, as is well known, in patients in whom peritonitis has already developed when they first reach the hospital. Early diagnosis and avoidance of catharsis through education both of the laity and the profession remains as important today as it was twenty-five years ago. Today, however, strict attention to the details of pre-operative and postoperative management, including fluid and electrolyte balance, use of chemotherapy, and gastro-intestinal syphonage is saving lives that would previously have been lost. Hospital morbidity in severe cases is cut down by the general use of the McBurney incision, less frequent drainage of the peritoneal cavity, and partial closure of the wound by leaving the skin open.

**10:30 INTERMISSION TO VIEW THE EXHIBITS**

**11:00 "Serologic Aspects of Syphilis"**

Francis E. Senear, M.D., Chicago

Francis E. Senear

*B.S., University of Michigan, 1912, M.D., 1914. Professor and Head of Department of Dermatology, University of Illinois College of Medicine since 1923. Member of Serologic Evaluation Committee, U. S. Public Health Service, American Medical Association, Chicago Dermatological Society, Society of Investigative Dermatology, the American Academy of Dermatology and Syphilology, the American Dermatological Association.*

The multiplicity of sero-diagnostic tests for syphilis is discussed together with a review of the studies carried out on an international and national scale in an attempt to determine the best available sero-diagnostic methods. The limitations of the diagnostic tests for syphilis are discussed with a consideration of these phases in which the serologic reaction is apt to be negative in the presence of disease and with a consideration of the other disorders which are capable of giving rise to biologic false positive reactions. Methods offered to distinguish between the true syphilitic reaction and the biologic false reaction are considered and their usefulness is discussed. The significance of positive cord blood findings is discussed and the significance of changes in the strength of the reaction of the cord blood are considered. The paradoxical false positive reactions occurring in individuals with no signs of syphilis and with no other disease to account for them are of great significance and are met with sufficient frequency to make their recognition a matter of great importance to the practitioner.

**11:30 "The Medical and Other Implications Which Relate to An Aging Female Population"**

GEORGE W. KOSMAK, M.D., New York City

*A.B., M.D., Columbia College, 1894. College of Physicians, and Surgeons, 1899. Attending Surgeon, Lying-In Hospital of New York, 1904-1926. Editor and founder, American Journal of Obstetrics and Gynecology, 1920 to date, editor of preceding publication, 1909-1919. Member, American Gynecological Society, American Association of Obstetricians and Gynecologists, Diplomate of American Board. Consultant in obstetrics to several hospitals; Federal Children's Bureau, New York State Department of Health, etc. Author of book, "Toxemias of Pregnancy" (1933), and of numerous articles in medical and lay journals on obstetric topics.*

It is an acknowledged fact that the average span of life has increased from about thirty-six years in 1850 to over sixty years in 1930 and will probably reach seventy years or more in 1960. The possible causes for this will be discussed and attention called to the associated medical and social problems. Undoubtedly better economic conditions, reduced hazards to life from improved sanitation, the lessening complications of child-bearing, and increased medical knowledge have constituted important contributing factors. We are faced, however, with the question of dependence by the older upon the younger groups and by the need of a closer study of the degenerative diseases which are manifest in the aged. Society and medicine must combine to study and to solve these problems.

**12:00 "The Needs and Possibilities of Research in Mental Disease"**

LAWRENCE KOLB, M.D., Washington

LAWRENCE KOLB

*M.D., University of Maryland, 1908. Assistant Surgeon General, U. S. Public Health Service, Washington, D. C., in charge of the Division of Mental Hygiene. Fellow, American College of Physicians, American Medical Association, and American Psychiatric Association. Member, National Committee for Mental Hygiene, American Association for the Advancement of Science, Research Council on Problems of Alcohol, Academy of Medicine of Washington, D. C., American Prison Association, Southern Medical Association, Medical Society of St. Elizabeth's Hospital, Kentucky Psychiatric Association. Trustee, William Alanson White Psychiatric Foundation.*

Recent advances in medical knowledge suggest lines of approach to the study of the fundamental basis of mental disease. These studies should include biology, biochemistry, neurophysiology, pathology, endocrinology, morphology, psychology, etc., as these subjects may have a bearing on mental disease. Such studies should be supplemented by extensive field studies into the social and environmental factors. Close coöperation between the Federal and State governments and agencies in a position to carry on research is needed to reap the fullest benefit from available resources.

**P. M.**

**12:30 End of First General Assembly**

**12:30 Luncheon**

# WEDNESDAY AFTERNOON
# September 17, 1941

## *Second General Assembly*

**Black and Silver Ballroom—Civic Auditorium**

VERNOR M. MOORE, M.D., Presiding
L. FERNALD FOSTER, M.D., and ROBERT G. LAIRD, M.D., Secretaries

**P. M.**

**1:30 "*De Officiis* in Anesthesia"**

WESLEY BOURNE, M.D., Montreal

WESLEY BOURNE

*M.D., C.M., McGill University, 1911; M.Sc., McGill, 1924; F.R.C.P., Canada, 1931; D.A. (R.C.P. & S. Eng.), 1938. First Hickman Medallist, Roy. Soc. of Medicine, 1935. Lieutenant-Colonel, R.C.A.M.C. Lecturer (Anesthesia) Department of Pharmacology, McGill University. Author of many publications on anesthesia. Member of the American Society for Pharmacology and Experimental Therapeutics.*

Although duties prescribed by justice are to be given precedence, and nothing ought to be more sacred, yet in the pursuit of knowledge, we should feel obliged to apply our wisdom to the service of humanity. We ought to consider ourselves bound to teach and train those who are desirous of learning. In such manner the benefits of anesthesia may be extended to those with whom we are united by the bonds of society. With increasing concerted effort, by coöperation between the laboratory worker and the clinician, anesthesia has improved, and the public is recognizing the need and importance of good anesthesia.

**2:00 "Medical Service in Small Industries"**

A. J. LANZA, M.D., New York City

A. J. LANZA

*M.D., George Washington University Medical School, 1906. Served in the United States Public Health Service from 1907 until 1920. During part of this time was detailed as Chief Surgeon of the United States Bureau of Mines, and later, Head of the Office of Occupational Diseases in the Public Health Service. Mostly engaged in Field work doing investigations in industrial hygiene. Conducted the first studies in this country on silicosis. 1920 became Medical Director of the Hydraulic Steel Company of Cleveland. In 1921 was appointed a special Staff member of the International Health Board of the Rockefeller Foundation, and was detailed as Adviser in industrial hygiene for the Commonwealth Government of Australia. In 1926 was appointed Assistant Medical Director of the Metropolitan Life Insurance Company. At present time is a member of the Council of the American Medical Association on Industrial Health. Member of the Sub-committee on Industrial Health of the Health and Medical Committee, Federal Security Agency. Chairman of the Medical Committee of the Air Hygiene Foundation.*

The great bulk of all wage earners are employed in small plants, and 97 per cent of all manufacturing plants employ fewer than 250 men. The problem of providing adequate medical and health service for American wage earners is, therefore, essentially a problem of devising a program that will fit the small

industry. While occupational diseases are a definite factor in the industrial health situation, the loss in working days is due to non-occupational hazards. The American Medical Association, State Medical Societies and other Medical Organizations, are taking cognizance of this problem, as well as official agencies, like the Public Health Service, and non-official agencies, such as the Air Hygiene Foundation. It is obvious that health and medical service in these small plants, where the majority of American workmen are employed, will be given by local physicians serving industry on a part-time basis. Here is an opportunity, and the responsibility of the medical profession. The difference between medical service in a small plant and in a large one should be a difference in quantity only, and not in quality. Then, if only a small reduction can be made in absences in industry, it will nevertheless accompany a great economic saving and be a contribution of inestimable value with the production problem that faces American industry at the present time.

**2:30 INTERMISSION TO VIEW THE EXHIBITS**

**3:00 "Hemorrhage in the Newborn"**

HENRY PONCHER, M.D., Chicago

HENRY PONCHER

*M.D., University of Michigan, 1927, Associate Professor of Pediatrics, College of Medicine, University of Illinois, Attending Physician, Cook County Hospital, Physician in charge of Pediatric Service, Research and Educational Hospitals of Illinois. Licentiate of American Board of Pediatrics.*

The newborn may potentially hemorrhage from a variety of causes. Practically, however, trauma alone or minimal trauma in the presence of a disturbed clotting mechanism are the ones that the practicing physician encounters most commonly in his daily work. The minimizing of the traumatic factor alone is outside the scope of this presentation. The part that disturbed coagulability of the blood plays in conditioning hemorrhage of traumatic origin or giving rise to spontaneous bleeding will be discussed. The recent work on prothrombin and vitamin K will be reviewed from the standpoint of its practical implications.

**3:30 Discussion Conferences with Guest Essayists**

**5:00 End of Second General Assembly**

———MSMS———

**DISCUSSION CONFERENCES**

**Wednesday, September 17**

**Thursday, September 18**

**3:30 to 4:30 p. m.**

**WITH THE GREAT ESSAYISTS**

Eleven discussion conferences with a different chairman in each subject, each day—leaders of outstanding ability in their specialty. Here the doctor will have a chance to ask those questions which have bothered him and to hear discussed and answered other questions of value to him in his daily practice.

**A RARE OPPORTUNITY**

# THURSDAY MORNING
# September 18, 1941

## *Fourth General Assembly*

**Black and Silver Ballroom—Civic Auditorium**

C. E. UMPHERY, M.D., Presiding,
L. FERNALD FOSTER, M.D., and ROGER V. WALKER, M.D.,
Secretaries

**A. M.**

**9:30 "Some Obstetric Opinions"**

JAMES R. MCCORD, M.D., Atlanta

JAMES R. MCCORD

*M.D., Jefferson Medical College, 1909; Professor of Obstetrics and Gynecology, Emory School of Medicine; Diplomate American Board of Obstetrics and Gynecology.*

The paper is, in the main, an expression of the author's own personal philosophy of obstetrics and a brief discussion concerning the management of quite a few obstetric difficulties. Practically all of the opinions are personal and have as their background Dr. McCord's vast obstetric experience.

**10:00 "Some Educational Aspects of Diagnosing Tuberculosis Early"**

CHARLES E. LYGHT, M.D., Northfield, Minnesota

CHARLES E. LYGHT

*M.D., C.M., Queen's University Faculty of Medicine, (Canada), 1926. Department of Student Health, University of Wisconsin, Madison, 1927-36; Director, 1932-36; Associate Professor of Clinical Medicine, University of Wisconsin Medical School. Professor of Health and Physical Education, and Director of the Student Health Service, Carleton College, Northfield, Minnesota, 1936 to date. Staff of Northfield City Hospital and Allen Memorial Infirmary. Fellow of the American College of Physicians. Member of several professional and scientific societies, including the Minnesota Trudeau Medical Society and Sigma Xi. Past President of the North Central Section, American Student Health Association, and, since 1936, Chairman of the Tuberculosis Committee, A.S.H.A. Publications, in addition to a weekly column: "Lyght on Health," have been mainly in the fields of clinical medicine, tuberculosis control and student health.*

Prognosis in tuberculosis depends on a combination of factors, chief favorable one being early diagnosis. Mass search has produced startling results in driving tuberculosis from first down to seventh among death causes. Individual practitioners must not decide that modern methods work only in community surveys or are the implements of specialists. Nor must we strengthen techniques only during periodic national emergencies. Tuberculin test, x-ray, with painstaking clinical, laboratory and epidemiological follow-up of patients and contacts are available to every physician. To wait for consumptive symptoms or to rely primarily on the stethescope is to diagnose late—inexcusable in the light of common knowledge and professional obligation.

**10:30 INTERMISSION TO VIEW THE EXHIBITS**

**11:00 "Factors in Deficiency Disease"**

V. P. SYDENSTRICKER, M.D., Augusta, Ga.

*M.D., Johns Hopkins, 1915. Intern and assistant resident physician, Johns Hopkins Hospital, 1915-17. Medical Corps, U. S. Army, 1917-19. Professor of Medicine, University of Georgia School of Medicine, 1923 to present.*

The background of clinical avitaminoses will be discussed from the standpoint of dietary inadequacy and also of conditioning disorders in individuals taking apparently adequate diets. Various clinical patterns of deficiency diseases will be presented with particular reference to the more common but often unrecognized syndromes. The rationale of treatment of both the acute and chronic deficiency diseases will be considered, with particular emphasis on the importance of multiple vitamin therapy.

**11:30 "Pathogenesis of Acidosis and Alkalosis"**

JAMES L. GAMBLE, M.D., Boston

JAMES L. GAMBLE

*A.B., Leland Stanford University, 1906, M.D., Harvard Medical School, 1910, S. M. (hon.) Yale University, 1930. Teaching and investigation in Department of Pediatrics, The Harvard Medical School (1915-22). Professor of Pediatrics, 1930 to date. Member American Pediatric Society, American Academy of Pediatrics, Association of American Physicians, American Society of Biological Chemists.*

Stability of the reaction of extracellular fluid depends on preservation of the normal values for carbonic acid and bicarbonate. Acidosis, or alkalosis, is almost always the result of change in bicarbonate rather than carbonic acid. Change in bicarbonate is always the result of change in other parts of the electrolyte structure. Illustration of such change caused by various conditions of disease is presented. The very frequent presence of volume change (dehydration) along with change in reaction is emphasized.

**P. M.**

**12:00 "The Physiology and Management of the First Stage of Labor"**

WM. E. CALDWELL, M.D., New York City

WM. E. CALDWELL

*M.D., New York University and Bellevue Hospital Medical School, 1904; Professor clinical obstetrics and gynecology and associate director Sloane Hospital, Columbia University, since 1927. Served as Captain Medical Corps, U. S. A., 1918. Fellow, American College of Surgeons; New York Obstetrical Society; American Gynecological Society; American Gynecologic Club; Sigma Xi; Nu Sigma Nu; Century Club. Contributed many professional articles to American Journal of Obstetrics and Gynecology and other journals. Received Honorary Degree as Doctor of Public Health, New York City.*

We will discuss the manner in which the lower uterine segment retracts over the piston; the formation of the contraction ring and its significance; and the variable mechanism indicated in the individual pelvis. We will point out how few cases there are of absolute disproportion, but how the shape of the inlet, the mid-pelvis or even the outlet modifies both the first and second stage. The changes in the shape of the child's head by molding will be emphasized. We will discuss the value of clinical examinations in the patient, what knowledge can be obtained, by vaginal and rectal examinations, including the possibility of assisting the mechanism of labor by manipulation from below in some cases; the necessity of complete retraction of the soft parts before operative procedure can be undertaken; and the importance of recognizing early the best method of safely delivering the child.

**P. M.**

**12:30 End of Fourth General Assembly**

**12:30 Luncheon**

———MSMS———

# THURSDAY AFTERNOON
# September 18, 1941

## *Fifth General Assembly*

**Black and Silver Ballroom—Civic Auditorium**

WILFRID HAUGHEY, M.D., Presiding
L. FERNALD FOSTER, M.D., and FRANK MURPHY, M.D., Secretaries

**P. M.**

**1:30 "Some Observations on the Use of Glasses"**
ALFRED COWAN, M.D., Philadelphia

ALFRED COWAN

*M.D., Medico Chirurgical College, Philadelphia, 1907. At present Professor of Ophthalmic Optics, Graduate School of Medicine, University of Pennsylvania; Ophthalmologist to Philadelphia General Hospital; Supervising Opthalmologist, Department of Public Assistance, Commonwealth of Pennsylvania; Consulting Ophthalmologist, Council for the Blind, Commonwealth of Pennsylvania; Ophthalmologist to Pennsylvania Working Home for Blind Men, Philadelphia; Author of "An Introductory Course in Ophthalmic Optics" and of "Refraction of the Eye," and a number of articles on ophthalmological subjects; a member of the American Ophthalmological Society; American Academy of Ophthalmology and Otolaryngology; College of Physicians, Philadelphia, and others.*

This presentation is offered with the hope that it will suggest to the general physician a simple way of describing certain physiologic optical principles to their patients—the purposes for which glasses are used, when they should be worn and when they are not worthwhile.

The normal eye is an image-forming optical instrument with a remarkable range of adaptability. Clear, comfortable vision depends primarily on a sharp image which must be formed exactly on the surface of the retina without undue effort of accommodation. In a refractive error—myopia, hypermetropia, astigmatism—the correct lens, when placed before the eye, changes the final direction of the rays of light so that on entering the eye they will be imaged on the retina. This is equivalent to placing an object at the exact position for which the eye is adapted.

A refractive error is not a disease, nor can it be produced by working under unfavorable conditions. Every person must eventually become presbyopic.

**2:00 "The Response of Tumors to Radiation"**

SHIELDS WARREN, M.D., Boston

SHIELDS WARREN

*B.S., Boston University; M.D., Harvard Medical School, 1923; Assistant Professor of Pathology, Harvard Medical School 1936 to date; Director, Massachusetts State Tumor Diagnosis Service, 1928 to date; Pathologist to New England Deaconess Hospital, 1927 to date, C. P. Huntington Memorial Hospital, 1928 to date, New England Baptist Hospital, 1928 to date, Pondville State Hospital, 1928 to date; Chairman, Cancer Committee, Massachusetts Medical Society; Vice President, American Association for Cancer Research.*

The response of tumors to radiation is based on the sensitivity of the type cell, the character of the supporting tissues, and the effect on the normal issues of the host. Depending on their response to radiation tumors may be classed as radio-sensitive, radio-responsive, and radio-resistant. Radio-resistance may be acquired following radiation therapy.

The tissue reactions for a given dose are fairly constant and characteristic regardless of minor variations in wave length. Recently irradiated tissue is very susceptible to infection.

**2:30 INTERMISSION TO VIEW THE EXHIBITS**

**3:00 "Recent Advances in Chemotherapy of Infectious Diseases"**

CHESTER S. KEEFER, M.D., Boston

CHESTER S. KEEFER

*M.D., Johns Hopkins University School of Medicine, 1922; Director, Evans Memorial, Massachusetts Memorial Hospitals; Wade Professor of Medicine, Boston University School of Medicine, also Professor of Medicine, Harvard Medical School; Diplomate, American Board Internal Medicine.*

The treatment of infectious diseases with the sulfonamide group has advanced remarkably in the past few years. New compounds are being developed and tested every year so that there are at least five effective agents available at present. Each one of these sulfonamide derivatives has its special field of usefulness, and will be discussed in this paper. One recent study with sulfadiazine and sulfaguanidine will be presented. In addition to the discussion of the sulfonamides, our experience in the treatment of local infections with "gramicidin," the extract of a soil bacillus, will be reviewed.

**3:30 Discussion Conferences with guest essayists.**

**5:00 End of Fifth General Assembly**

**PRESIDENT'S NIGHT**
**(Third General Assembly)**
Wednesday, September 17, 8:30 p. m.
Ballroom, Pantlind Hotel
Brief program, followed by dancing, floor-show and entertainment.

**SMOKER**
**(Sixth General Assembly)**
Thursday, September 18, 9:00 p. m.
Ballroom, Pantlind Hotel
A joyous night for members only.

# PRELIMINARY
# — PROGRAM of SECTIONS —
# FRIDAY MORNING
# September 19, 1941

## SECTION ON GENERAL MEDICINE

Chairman: T. I. BAUER, M.D., Lansing
Secretary: GORDON B. MYERS, M.D., Detroit

**Ballroom—Pantlind Hotel**

**A. M.**

**9:00 "The Differential Diagnosis of Abdominal Pain"**

MILTON R. WEED, M.D., Detroit

**9:30 "The Differentiation Between Malignant and Benign Ulcerating Lesions of the Stomach"**

H. M. POLLARD, M.D., Ann Arbor
WM. C. SCOTT, M.D., Ann Arbor

**10:00 "Problems in the Differential Diagnosis of Coronary Artery Disease"**

A. R. BARNES, M.D., Rochester, Minnesota

A. R. BARNES

*M.D., Indiana University School of Medicine, 1919; Professor of Medicine, Mayo Foundation for Medical Education and Research, University of Minnesota, and Chief of a Section in Medicine, The Mayo Clinic, Rochester, Minnesota; Diplomate, American Board of Internal Medicine.*

So much has been said and written on the subject of coronary sclerosis that there is some evidence of a tendency to make the diagnosis more frequently than the facts warrant. Unfortunately, the syndrome of angina pectoris is a diagnosis that has to be made on the basis of the patient's symptoms and much skill and experience is required in arriving at the diagnosis. There is a tendency to allow the electro-cardiogram to influence this diagnosis, unduly. There are other clinical conditions, such as pericarditis, pulmonary embolism, cholecystic disease and diaphragmatic hernia, which may simulate the pain of coronary artery disease very closely. This discussion will concern itself with the essential clinical features of coronary disease and its differential diagnosis from the clinical conditions mentioned.

**10:30 "Clinical Use of the Diuretics"**

RICHARD H. LYONS, M.D., Eloise

**11:00 "Treatment of Pyelonephritis"**

MUIR CLAPPER, M.D., Detroit

**11:30 "Useful Drugs in the Treatment of Asthma"**

JOHN M. SHELDON, M.D., Ann Arbor

**12:00 Election of Officers**

## SECTION ON SURGERY

Chairman: O. H. GILLETT, M.D., Grand Rapids
Secretary: ROGER V. WALKER, M.D., Detroit

**Black and Silver Ballroom—Civic Auditorium**

**8:30 A. M.**

### SYMPOSIUM ON TRAUMATIC SURGERY

**"Management of Skull Fractures"**

HARRY E. MOCK, M.D., Chicago

HARRY E. MOCK

*M.D., Rush Medical College, 1906. Associate Professor of Surgery Northwestern University Medical School; Senior Surgeon St. Lukes Hospital, Chicago; Fellow American Board of Surgery, American College of Surgeons; Chicago Surgical Society; Chicago Institute of Medicine; American Association of Surgery of Trauma, and others. Author of many surgical subjects. Exhibitor in the Scientific Exhibits of the American Medical Association from 1931 to 1938 on the subject of Skull Fractures and Craniocerebral Injuries.*

Craniocerebral injuries in the United States occur to the extent of more than half a million victims a year. Approximately 65 per cent of the deaths resulting from skull fractures occur in the first twenty-four hours following the injury. The widespread distribution and the early occurence of death will always make this a problem for the general physician and surgeon. The author collected and analyzed 3,300 cases of consecutive proved skull fractures from 1929 through 1934. The mortality rate varied from 25 per cent to 49 per cent during that period. The last ten years has brought forth abundant teaching of better management. Has it reduced the mortality rate? Is there room for still further improvement? These and other questions are answered in the author's second nation-wide survey of 3,200 consecutive proved skull fractures.

**"Lacerations of the Head and Face"**

FERRIS N. SMITH, M.D., Grand Rapids

**"Choice of Anesthesia in Emergency Surgery"**

WESLEY BOURNE, M.D., Montreal

The general principles of anesthesia are not affected by the circumstances of emergency, yet the individual may frequently be most urgently in need of the best attention known to anesthesia. Whatever is done should suit the general condition as well as the surgical requirements of the case. When shock is present, there must be the greatest circumspection and the least possible interference until the circulation is improved. The relative advantages of the drugs and the methods of their administration are discussed under the groupings of regional and general anesthesia, showing the appropriate places of local infiltration, of nerve block and of spinal anesthesia, and too, those for inhalation and intravenous anesthesia.

**"Early Care of Compound Fractures"**

CARL E. BADGLEY, M.D., Ann Arbor

**"Management of Abdominal Injuries"**

OWEN H. WANGENSTEEN, M.D., Minneapolis

World War Number Two has focused attention upon the subject of trauma sharply again. Whereas the mortality of abdominal injuries in war has always been high, statistically, the incidence of abdominal injuries, as compared with the more frequent injuries of extremities and head, has not been great. World War Number One settled, once and for all, the importance of early closure of perforating wounds of the hollow abdominal viscera. Theretofore, the conservative management of bullet wounds of the intestine had been advocated by many military surgeons. Despite general acceptance of early operative treatment, the mortality still continues high, because of the serious threat to life, occasioned by spillage of intestinal content into the peritoneal cavity.

In civil practice, one of the greatest difficulties is determination of whether or not blunt trauma has ruptured a hollow viscus. Tears in solid viscera, such as liver or spleen, may be treated conservatively, if hemorrhage is not alarming. Bleeding stops frequently spontaneously. Ruptures of hollow viscera must be closed if the patient is to have a chance of survival.

**"Treatment of Shock from War Injuries"**

HENRY H. HARKINS, M.D., Detroit

**Election of Officers**

———MSMS———

## SECTION ON OBSTETRICS AND GYNECOLOGY

Chairman: CLAIR E. FOLSOME, M.D., Ann Arbor
Secretary: ROBERT S. KENNEDY, M.D., Detroit

**Grill Room—Pantlind Hotel**

**A. M.**

**9:30 "Facilities and Practices in Licensed Maternity Hospital and Maternity Homes in Michigan"**

ALEXANDER M. CAMPBELL, M.D., Grand Rapids

**9:50 "The Use and Abuse of Stilbesterol in Gynecologic Practice"**

ALLAN C. BARNES, M.D., Ann Arbor

**10:40 "The Dangers of Breech Delivery"**

WARD F. SEELEY, M.D., Detroit
R. S. SIDDALL, M.D., Detroit

**11:00 "Therapy of the Estrogens"**

RICHARD W. TELINDE, M.D., Baltimore

RICHARD W. TELINDE

*A.B., University of Wisconsin, 1917, M.D., Johns Hopkins University, 1920. Professor of Gynecology, Johns Hopkins University. Chief Gynecologist, Johns Hopkins Hospital. Visiting Gynecologist, Union Memorial Hospital, Church Home and Infirmary and Hospital for Women of Maryland.*

Attention is called to the many abuses in endocrine therapy in general and a warning is given to use hormones only when there is a sound physiological basis for treatment. The results at the author's clinic in the treatment of certain conditions in which he has had special experience are considered. The technique of the treatment of gonococcal vaginitis with estrogenic suppositories, both natural and synthetic, is discussed. The treatment of menopausal symptoms by the natural hormones and stilbestrol is considered. Finally, a new technique for the administration of pellets of crystalline estrone for prolonged relief of menopausal symptoms is given in detail.

**11:30 Election of Officers**

**12:00 Luncheon**

## SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

Chairman: Robert H. Fraser, M.D., Battle Creek
Vice Chairman: A. S. Barr, M.D., Ann Arbor
Secretary: Robert G. Laird, M.D., Grand Rapids
Vice Secretary: Arthur E. Hammond, M.D., Detroit

### OPHTHALMOLOGY

**Room "F"—Civic Auditorium**

**A. M.**

**9:30 "Uveitis"**

Alfred Cowan, M.D., Philadelphia

The various parts of the uveal tract are so intimately related that hardly, if ever, is any one part affected without involvement of all or nearly all of the whole tract. More and more, since the general use of the slit lamp and corneal microscope, is this observed; so much so that specific diagnoses as iritis, cyclitis, or irido cyclitis are seldom well justified. The first evidence of any insult to the iris or ciliary body is a disturbance of the pigment. Often we see evidence of uveal change, especially disturbance of the pigment, which is hard to classify as either a noninflammatory degenerative process or a low grade, chronic uveitis. The etiologic factors in these cases are nearly always baffling. So frequently do we see such conditions that it is felt that many which are diagnosed as primary glaucoma are in reality cases of uveitis with secondary glaucoma.

**10:10 Discussion—20 Minutes**

**10:30 "Dendritic Keratitis"**

John O. Wetzel, M.D., Lansing

**10:50 Discussion—10 Minutes**

**11:00 "Management of Traumatic Injuries to the Eyelids and Globe"**

Gordon L. Witter, M.D., Port Huron

**11:20 Discussion—10 Minutes**

**11:30 "Chemical Injuries"**

Melvin H. Pike, M.D., Midland

**11:50 Discussion—10 Minutes**

**12:00 "Some Uses of Chemotherapy in Ophthalmology"**

Parker Heath, M.D., Detroit

**P. M.**

**12:20 Discussion—10 Minutes**

### OTOLARYNGOLOGY

**Room "G"—Civic Auditorium**

**A. M.**

**9:00 "Mistakes Made in the Diagnosis and Estimation of Deafness"**

D. E. S. Wishart, M.D., Toronto, Ontario

**9:30 Discussion—10 Minutes**

**9:40 "Acute Suppuration in the Spaces of the Neck" and Motion Picture Demonstration: "Approaches to the Surgical Spaces of the Neck."**

Samuel Iglauer, M.D., Cincinnati

Samuel Iglauer

*M.D., Ohio Medical College, 1898; F.A.C.S.; Professor of Otolaryngology, College of Medicine, University of Cincinnati; Director of Otolaryngology, Cincinnati General Hospital, Children's Hospital, and Jewish Hospital; member, American Laryngological, Rhinological, and Otological Society, American Broncho-Esophagological Assn., American Laryngological Assn., American Academy of Ophthalmology and Otolaryngology.*

During recent years a great deal of exact attention has been given to deep infections in the neck. These infectious processes may localize in the lymph glands, in the "spaces" of the neck, or occasionally within the veins. The anatomic spaces contain loose distensible areolar connective tissue. The spaces are limited by tough, fibrous layers (fascia) or by muscles or viscera The spaces most commonly involved are: 1. Peripharyngeal; 2. Retropharyngeal; 3. Parapharyngeal (Pharyngo-maxillary); 4. Periesophageal (Mediastinitis); 5. Submental (Ludwig's Angina); 6. Septic thrombophlebitis (jugular) may occur as a complication.

The signs and symptoms of infection in each space will be enumerated, and the surgical approach to each space will be briefly described.

**Discussion and Bibliography Question Box (by request)**

**11:30 "Carcinoma of the Mastoid. Case report"**

Harvey E. Dowling, M.D., Detroit

**11:50 "Treatment of Hemorrhage in Otolaryngologic Practice"**

James E. Croushore, M.D., Detroit

**P. M.**

**12:10 Discussion of papers by Drs. Dowling and Croushore**

**12:30 Section Luncheon, Pantlind Hotel**
**Election of Officers of Section on Ophthalmology and Otolaryngology**
**Short Business and Medical Economics Session.**
**"Problems of Distribution of Ophthalmologic Care"**
Ralph Pino, M.D., Detroit

———MSMS———

## SECTION ON PEDIATRICS

Chairman: Harry A. Towsley, M.D., Ann Arbor
Secretary: Leon DeVel, M.D., Grand Rapids

**Swiss Room—Pantlind Hotel**

**A. M.**

**9:00 Case Report: "Tumor of Adrenal Cortex in an Infant of Seventeen Months" Color Photography and Autopsy Findings**

Rockwell M. Kempton, M.D., Saginaw
Oliver W. Lohr, M.D., Saginaw

**9:15 Panel Discussion: "Diarrhea in Infancy"**

Chairman—Charles F. McKhann, M.D., Ann Arbor
Discussants—James Wilson, M.D., Detroit
A. Morgan Hill, M.D., Grand Rapids
Wyman C. C. Cole, M.D., Detroit
Mark Osterlin, M.D., Traverse City
Warren Wheeler, M.D., Lansing

**11:15 "Cerebral Atrophy in Infants and Children"**

HAROLD K. FABER, M.D., San Francisco

HAROLD K. FABER

*A.B., Harvard College, 1906; M.D., University of Michigan, 1911. Professor of Pediatrics, Stanford University School of Medicine; Pediatrician-in-Chief, Stanford University Hospitals, San Francisco. Member: American Pediatric Society, American Academy of Pediatrics, Society for Pediatric Research, et cetera.*

The causes of mental deficiency, spastic diplegia and convulsive disorders long obscure, have been clarified for a considerable percentage of cases by consideration of the effects of anoxia on the brain and by studies of the air encephalogram. Heredity is now found to play a much smaller part than had been previously supposed, and the same is true of intracranial hemorrhage at birth. It is, however, a mistake to believe that all cases date from the time of birth. Both fetal and postnatal disorders are of etiological importance. A series of cases is reviewed in which the causative factors are discussed. Some preventive suggestions are presented.

**12:00 Business Meeting—Election of Officers**

———MSMS———

## SECTION ON DERMATOLOGY AND SYPHILOLOGY

Chairman: CLAUD BEHN, M.D., Detroit
Secretary: FRANK STILES, M.D., Lansing
**Directors' Room—Civic Auditorium**

**A. M.**

**9:30 "Therapeutic Effects of Vitamin B Factors in Dermatology"**

CARROLL S. WRIGHT, M.D., Philadelphia

The various factors of Vitamin B are of more than ordinary intrest to the dermatologist. Vitamin $B_1$ is now widely used to relieve the pain of herpes zoster and there is some evidence that it may be helpful in psoriasis. The spectacular improvement in pellagrins following the administration of nicotinic acid is now fully recognized. Riboflavin cures cheilosis, erosions around the eyes, "sharkskin" lesions of the skin over the nose and may be helpful in fissuring around the ears. It also increases the efficacy of nicotinic acid in certain pellagrins (Spies). The filtrate factor (pantothenic acid) is probably not concerned in pellagra. Interest centers in its anti-gray hair action. Vitamin $B_6$ (pyrodoxine hydrochloride), often called the "rat anti-dermatitis factor" is known to have a definite action in the treatment of pellagra . This study is concerned chiefly with the treatment of various types of dermatitis (or eczema) with Vitamin $B_6$, including studies of the urinary excretions of this Vitamin.

**10:00 Discussion**

**10:20 "Diagnosis and Treatment of Vesicular and Vesiculo-pustular Eruptions of the Hands and Feet"**

S. WILLIAM BECKER, M.D., Chicago

S. WILLIAM BECKER

*B.S., 1918, M.D., 1921, University of Michigan; M.S., 1928, University of Minnesota; Assistant Professor Dermatology, University of Chicago, 1927-30, Associate Professor since 1930. Member A.M.A. and component societies; American Academy of Dermatology and Syphilogy; American Dermatological Association; and other organizations; Diplomate of American Board of Dermatology and Syphilology. Author: "Commoner Diseases of the Skin," 1935; "Ten Million Americans Have It," 1937; "Modern Dermatology and Syphilology," 1940 (with Obermayer).*

Critical study has shown that vesicular fungous infection of the hands is almost unknown. Vesicular eruptions of the feet (athletes' foot) have been proven to be caused by fungi in only five to 15 per cent of children and only 30 per cent of adults. The heat of summer increases the percentage of fungous infection to 50.

Epidermal hypersensitiveness to fungous allergens may result in vesicular lesions on the hands (trichophytids), produced by allergens reaching the palms from the feet through the blood stream. Other vesicular and vesiculo-pustular eruptions of the hands (bacterids, dyshidrosis on fungous basis) cannot be proven to be allergic, since epiderman hypersensitiveness does not exist in patients with such disorders.

**10:50 Discussion**

**11:10 "Five-Day Treatment of Early Syphilis"**

LOREN W. SHAFFER, M.D., Detroit

**11:40 Discussion**

**12:00 Election of Officers**

**P. M.**

**12:30 Luncheon at Pantlind Hotel**

———MSMS———

## SECTION ON RADIOLOGY, PATHOLOGY AND ANESTHESIA

Chairman: FRANK W. HARTMAN, M.D., Detroit
Secretaries: CLYDE K. HASLEY, M.D., Detroit,
FRANK J. MURPHY, M.D., Detroit
**Red Room—Civic Auditorium**

**PANEL DISCUSSION ON "SOME PHASES OF THE CANCER PROBLEM"**
**9:30 A. M.**

**1. Diagnosis**

**(a) General**

HENRY J. VANDENBERG, M.D., Grand Rapids
N. M. ALLEN, M.D., Detroit

**(b) X-Ray**

BERNARD H. NICHOLS, M.D., Cleveland

BERNARD H. NICHOLS

*M.D., Starling Medical College, 1940; Practiced general medicine and roentgenology at Ravenna, Ohio, from 1904 to 1917; commissioned in Medical Corps of the U. S. Army and became instructor of Roentgenology at Cornell University, New York City. Member Base Hospital 55 as Chief of Department of Roentgenology in September 1918, directed Department of Roentgenology in France until end of war. Returned to U. S. A. and became Director of Roentgenology in the Embarkation Hospital, No. 3, New York City. Discharged from Army, September, 1920; Director of Department of Roentgenology in Cleveland Clinic from 1920 to date. President Radiological Society of North America in 1940. Co-author with Dr. William E. Lower of text book "Roentgenographic Studies of the Urinary System" has published about 100 scientific articles.*

LAWRENCE REYNOLDS, M.D., Detroit

**(c) Pathology**

CARL V. WELLER, M.D., Ann Arbor
DONALD C. BEAVER, M.D., Detroit

**2. Treatment**

**(a) Surgical**

ROY D. MCCLURE, M.D., Detroit
FRED A. COLLER, M.D., Ann Arbor

**(b) Irradiation**

ROLLIN H. STEVENS, M.D., Detroit
ISADORE LAMPE, M.D., Ann Arbor

**3. Registration and Follow-Up**

SHIELDS WARREN, M.D., Boston
FRED J. HODGES, M.D., Ann Arbor
Traian LEUCUTIA, M.D., Detroit
A. B. MCGRAW, M.D., Detroit

**Election of Officers**

# FRIDAY AFTERNOON
# September 19, 1941

## *Seventh General Assembly*

**Black and Silver Ballroom—Civic Auditorium**

HENRY R. CARSTENS, M.D., Presiding
L. FERNALD FOSTER, M.D., and LEON DE VEL, M.D., Secretaries

**P. M.**

**1:30 "Focal Infection in the Nose and Throat—Retrospect and Forecast"**

D. E. STAUNTON WISHART, M.D., Toronto, Ontario

D. E. S. WISHART

*B.A., 1909, M. D., University of Toronto, 1915.*

Three years' service in the field with the 10th (Irish) Division. Mediterranean Expeditionary Force — Sulva Bay, Serbia, Struma Valley and Palestine. Surgeon-in-Chief, Department of Otolaryngology, Hospital for Sick Children, Toronto, and Senior Demonstrator, Department of Otolaryngology, University of Toronto. Author of: Section on Surgery of the Ear, Lewis' System of Surgery: Relation of infection of the Ear and Infection of the Intestinal tract in Infants, Results of five years' study—Routine Hearing Tests and many other scientific articles.

**2:00 "New Therapy of Common Skin Diseases"**
CARROLL S. WRIGHT, M.D., Philadelphia

CARROLL S. WRIGHT

*B.S., University of Michigan, 1917; M.D., University of Michigan, 1919. Instructor in Dermatology and Syphilology University of Michigan Medical School, 1920-1922; Associate Profes sor of Dermatology and Syphilology Graduate School of Medicine, University of Pennsylvania. Professor of Dermatology and Syphilology Temple University School of Medicine. Consultant Dermatologist to Philadelphia Municipal Hospital; Widener School for Crippled Children; Shriner's Hospital; Pennsylvania Institute for Blind; Pennsylvania Institute for the Dumb; Vineland Training School. Trustee of Research Institute of Cutaneous Medicine. Associate Editor of the "Medical World" and "The Weekly Roster and Medical Digest." Member of American Dermatological Association, Society for Investigative Dermatology, American Academy of Dermatology, Philadelphia College of Physicians, Nu Sigma Nu and Sigma Xi. Author of textbooks "Treatment of Syphilis" with Dr. Jay F. Schamberg and "Manual of Dermatology" and numerous contributions to dermatological literature.*

Since the turn of the century there has been marked progress in the treatment of many of the commonly seen skin diseases. Unsightly vascular nevi with the exception of port-wine marks can be successfully treated in one of several ways. The acne of adolescence, at our time considered a necessary evil to be suffered in silence until cured by nature, is in most instances amenable to modern therapy with a resultant lessening in badly scarred faces. The fungus infections which may attack any part of the human integumnet and its appendages can in most cases be conquered. In the treatment of those skin infections due to cocci, new drugs administered both internally and externally have improved therapeutic results. Psoriasis still remains a disease of unknown etiology and must still be considered incurable, but there is evidence of some progress as regards its therapy. Skin cancer, unless woefully neglected, may be regarded as curable with present day methods of treatment. The situation with regard to the "curability" of skin diseases has changed since the day 25 or 30 years ago that a dermatologist gave as one of his reasons for selecting this specialty that "patients with skin diseases never get well." These newer therapeutic procedures in the above named dermatoses will be discussed.

**2:30 INTERMISSION TO VIEW THE EXHIBITS**

**3:00 "Child Health in National Defense"**
BORDEN S. VEEDER, M.D., St. Louis, Missouri

**3:30 "The Relationship of the Reticulo-Endothelial System to Cellular and Humoral Immunity"**

C. A. DOAN, M.D., Columbus, Ohio

C. A. DOAN

*B.S., Hiram College; M.D., 1923 Johns Hopkins Medical School. R.H.O., Johns Hopkins Hospital, 1923; Assistant Department of Anatomy, Johns Hopkins, 1924; Assistant Department of Medicine Harvard Medical School; Assistant Physician, Boston City Hospital; Assistant Thorndike Memorial Laboratory; Associate in Medical Research, Rockefeller Institute, 1925-30. Fellow and member of numerous scientific and medical organizations. President Ohio Public Health Association, 1939 to date; Director-at-large National Tuberculosis Association. Author of more than 100 scientific articles and books on medical subjects, particularly hematology and tuberculosis.*

The phagocytic cells which comprise the Reticulo-Endothelial System of the body have long been known to function physiologically as conservators of essential materials from worn out or senile blood cells. More recently, excessive pathologic sequestration of red cells, granulocytes or blood platelets in the parenchyma of the spleen, with symptom-producing destruction of these essential elements by hyperplastic splenic macrophages, has resulted in recognition of several clinical syndromes, each one of which has been effectively controlled by successful splenectomy.

Still more recently studies with "marked" dye antigens have definitely established these phagocytic elements as the most probable source of circulating specific anti-bodies. This latter evidence places on a sounder basis, the approach to the problems of humoral immunity, and demonstrates the extremely close association with cellular immunity.

**4:00 "The Ulcer Problem and The Surgeon"**

OWEN H. WANGENSTEEN, M.D., Minneapolis

OWEN H. WANGENSTEEN

*A.B., University of Minnesota, 1919; M.D., 1922; Ph.D., (Surgery), 1925; Professor in Surgery since 1931, Director of Department and Surgeon-in-Chief since 1930. Served in World War as a private in Student Training Corps. Member of many scientific and medical organizations.*

The importance of acid in the genesis of ulcer will be emphasized. Experiments performed in the Surgical Laboratory, in which ulcer has been produced in a variety of animals by stimulating the endogenous gastric secretory mechanism, will be reviewed. The choice of operative procedure in the surgical management of ulcer, which will insure effective depression of the gastric secretory mechanism, will be discussed, and the criteria of an acceptable operation defined. Technical and nutritional problems which confront the surgeon, affording his patient maximal assurances of safety, will be presented.

**4:30 End of Seventh General Assembly**

**END OF CONVENTION**

# TECHNICAL EXHIBITS

**Abbott Laboratories** **Booth No. C-3**
**North Chicago, Illinois**

You are heartily invited to discuss the newer specialties with the Abbott-trained Professional Representatives in attendance. The wide assortment of products displayed in this exhibit merit your attention and study. Your questions are solicited. Description of the items shown is prohibited by space, so! COME IN AND SEE US!

**The Baker Laboratories** **Booth No. D-7**
**Cleveland, Ohio**

Baker's complete line of infant foods, indicating the newer trends in modern infant feeding, will be on display. Baker MODIFIED MILK, powder and liquid, is a completely modified milk in which the composition of the essential food elements has been so altered and adjusted as to closely approximate breast milk. MELCOSE, a completely prepared liquid milk is very economical. MELODEX, maltose and dextrin, is made especially for modifying fresh or evaporated milk.

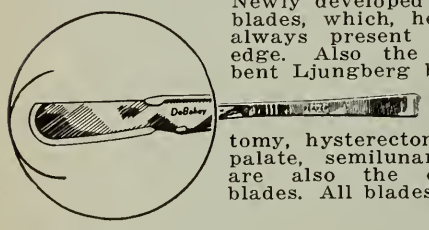
**Bard-Parker Company** **Booth No. C-2**
**Danbury, Connecticut**

The following products will be exhibited at the Bard-Parker Booth: rib-back surgical blades, long knife handles for deep surgery, renewable edge scissors, formaldehyde germicide, and instrument containers for the rustproof disinfection of surgical instruments, transfer forceps for the aseptic transportation of instruments, hematological case for obtaining bedside blood samples, ortholator for obtaining accurate dental radiographs.

**Barry Allergy Laboratory, Inc.** **Booth No. B-15**
**Detroit, Michigan**

A duplicate of the exhibit shown at the A.M.A. in Cleveland will be brought to the Michigan State Meeting in Grand Rapids. Services and products as well as many research problems will be presented in an interesting and unique manner. Both Mr. Charles Fowler and Mr. Barry, President, will be present to welcome all visitors.

**Rudolph Beaver, Inc.** **Booth No. E-13**
**Waltham, Massachusetts**




Newly developed all-bellied DeBakey blades, which, held in any position, always present a rounded cutting edge. Also the recently developed bent Ljungberg blades for deep and special surgery, such as cholecystectomy, hysterectomy, hip, spine, cleft palate, semilunar cartilage. There are also the conventional shape blades. All blades fit every handle.

**Becton, Dickinson & Co.** **Booth No. C-16**
**Rutherford, New Jersey**

A full line of B-D Products including clinical thermometers, hypodermic syringes and needles, Ace bandages, Asepto syringes and a full line of their diagnostic instruments including the new line of low priced blood pressure instruments, will be on display. Doctors will be particularly interested in No. 5018 which comprises a portable type manometer and triple change stethoscope in handy leather pouch with slide fastener.

**Bilhuber-Knoll Corporation** **Booth No. B-11**
**Orange, New Jersey**

Your visits are welcomed. Mr. Laurel Johnson will be glad to give careful attention to questions and discussions on Dilaudid, Metrazol, Phyllicin, Theocalcin, etc. Register for a copy of the new "Note Book of Original Medicinal Chemicals." Colored charts—muscular, skeletal, circulatory, and nervous systems may be had upon request.

**Ernst Bischoff Company** **Booth No. E-19**
**Ivoryton, Connecticut**

ACTIVIN, the first American produced shockless foreign protein for nonspecific therapy. ANAYODIN is an effective, non-toxic amebicide. It attacks the amebas which have penetrated the tissues. DIATUSSIN, the original drop-dose cough remedy with a thirty-five year record of efficacy. LOBELIN-Bischoff, a direct stimulant to the respiratory center. The resuscitant indicated in all forms of respiratory failure or depression. STYPTYSATE, a vegetable hemostatic, with extremely high vitamin K activity, indicated for the control of all seeping hemorrhages.

**The Borden Company** **Booth No. F-1**
**New York City**

Visit the Borden exhibit to see infant foods of unsurpassed quality. Biolac, the distinctive new **liquid** infant food, affords convenience, economy, and optimal nutrition. Beta Lactos is **nature's** carbohydrate in an improved, readily soluble form. Dryco provides **formula flexibility** for every feeding problem. Also Klim, Merrell-Soule products, and Irradiated Evaporated Milk. Mr. H. H. Baker and Mr. A. D. Farrell will be in charge of the exhibit.

**Burroughs Wellcome & Co. (USA) Inc.**
**New York City** **Booths No. B-4 and B-5**

A representative group of fine chemicals and pharmaceutical preparations, together with new and important therapeutic agents of special interest to the medical profession, will be presented.

**Cameron Surgical Specialty Company** **Booth No. B-8**
**Chicago, Illinois**

See the new Cameron-Schindler Flexible Gastroscope, the Color-Flash Clinical Camera, the Projectoray, the Mirrorlite and latest developments in electrically lighted diagnostic and operating instruments for all parts of the body. You will also be interested in our radio frequency knives and coagulators.

**S. H. Camp and Company** **Booth No. C-18**
**Jackson, Michigan**

A life sized reproduction of the Camp Transparent Woman will be displayed as the central theme of a typical service department equipped to serve patients with the various supports prescribed by physicians. A complete line of merchandise for prenatal, postnatal orthopedic, visceroptosis, sacro-iliac, hernia and other specific conditions will be shown. Experts from the Camp staff will be in attendance to answer questions.

**Ciba Pharmaceutical Products** **Booth No. D-6**
**Summit, New Jersey**

Physicians are cordially invited to visit the Ciba Booth where they will find the well known line of CIBA specialties on display.
Mr. Frank H. Pratt will be at the booth and will be glad to discuss these products and supply interesting new information regarding many of them.

**Coca-Cola Company** **Booth No. A-7**
**Atlanta, Georgia**

Coca-Cola will be served to the physicians with the compliments of the Coca-Cola Company.

**Cottrell-Clarke, Inc.** **Booth No. F-9**
**Detroit, Michigan**

Mostly in the east, are some half dozen specializing printers engaged in supplying medical men with records and stationery; still nowhere is there an organization to compare with the personal attainments of Michigan's own COTTRELL-CLARKE, INC. (locally and popularly known as "the physicians' stationery folks") in developing varied types and sizes of folders and other ideas, all designed for facilitating neater and better record keeping. By all means see Cottrell-Clarke's exhibit this year.

**The Cream of Wheat Corporation** **Booth No. D-16**
**Minneapolis, Minnesota**

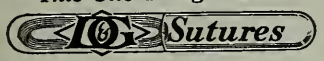
The 5-minute "CREAM OF WHEAT" will be on exhibit. This improved cereal is completely cooked in 5 minutes and has been fortified with additional vitamin $B_1$ (wheat germ and thiamin), iron, calcium, and phosphorus.

**Cutter Laboratories**
**Chicago, Illinois**
**Booth No. E-4**

Cutter Laboratories will display their latest transfusion equipment, including the Saftivalve Transfusion Outfit and prepared human serum and plasma.

**Davis & Geck, Inc.**
**Brooklyn, New York**
**Booth No. A-4½**

*"This One Thing We Do"*




Davis & Geck, Inc. will display its complete line of sterile sutures including . . . fine gauge (0000 and 00000) catgut . . . a comprehensive group of sutures armed with swaged-on atraumatic needles and designed for specific surgical procedures . . . Dermalon skin and tension sutures (processed from nylon) which, because of marked physical advantages and economy, are rapidly replacing silkworm gut and other nonabsorbable materials.
A further feature of this exhibit will be a motion picture theater in which a diversified program of surgical films, in full color, will be presented daily.

**R. B. Davis Sales Company**
**Hoboken, New Jersey**
**Booth No. E-21**

You are invited to enjoy a drink of delicious Cocomalt at Booth No. E-21. Cocamalt is refreshing, nourishing and of the highest quality. It is fortified with vitamins A, $B_1$ and D; calcium and phosphorus to aid in the development of strong bones and sound teeth; iron for blood; protein for strength and muscle; carbohydrate for energy.

**DePuy Manufacturing Company**
**Warsaw, Indiana**
**Booth No. E-16**

You are invited to visit our exhibit where many new fracture appliances and bone instruments will be on display. Mr. Charles F. Klingel will be in charge and will be glad to answer any of your questions.

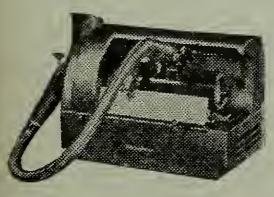
**Detroit Creamery Company**
**Detroit, Michigan**
**Booth No. F-3**

Sealtest stands for quality milk, cream and ice cream. The red and white tradename is an assurance to the consumer of pure, wholesome dairy products produced in modern, sanitary plants operating under strict laboratory control.

**Detroit X-Ray Sales Co.**
**Detroit, Michigan**
**Booth No. A-4**

The Detroit X-Ray Sales Company again takes pleasure in presenting important advances in shockproof x-ray equipment, designed in the "Mattern manner."
We feel that a visit to our booth will interest those contemplating the purchase of x-ray equipment. A cordial welcome is extended. Messrs. Hanks, McAlpine and Robinson, also Mr. R. J. Carseth, the Mattern factory representative, will be in attendance.

**Dictaphone Corporation**
**Detroit, Michigan**
**Booth No. B-13**



You are cordially invited to inspect the new Dictaphone models and to learn how this modern dictating machine is serving physicians throughout the country. Make the Dictaphone Booth your headquarters.
The Dictaphone displays will be in charge of H. E. Trapp, Grand Rapids Manager, assisted by members of his staff.

**The Dietene Company**
**Minneapolis, Minnesota**
**Booth No. B-7**

The Dietene Company cordially invites all members of the Michigan State Medical Society and their guests to visit our booth.
Our representatives will be looking forward to the opportunity of presenting our group of special purpose foods.

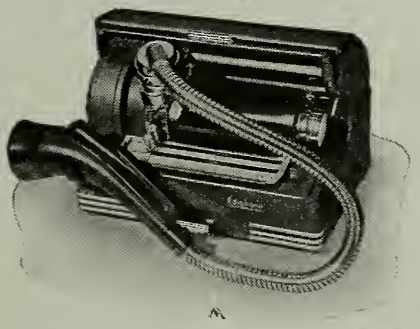
**Doho Chemical Corporation**
**New York City**
**Booth No. E-8**

The Auralgan Exhibit consists of a model of the human auricle four feet high together with a series of twenty-four three dimensional ear drums, modeled under the supervision of outstanding otologists. Each of these drums depicts a different pathologic condition based upon actual case observation and prepared, in so far as possible, with strict scientific accuracy so as to be highly instructive and interesting to all physicians.

**Duke Laboratories, Inc.**
**Stamford, Connecticut**
**Booth No. C-4**

The Duke Laboratories, Inc., will demonstrate the original, American-made, stretchable, adhesive surfaced bandage, Elastoplast, which is used whenever compression and support are required. Samples of Mediplast and Elastoplast Occlusive dressing, now being so widely used in plants on Defense work, will be available. Ask for samples of the prescriber's cosmetics—Nivea and Basis Soap—too.

**The Ediphone Company**
**Grand Rapids, Michigan**
**Booth No. E-5**



THE EDIPHONE COMPANY extends a cordial invitation to all physicians to visit the display of EDIPHONE equipment. See the new Miracle Model Edison Voice Writer, also new Streamline Cabinet designs, manufactured by Edison, who invented and perfected sound recording. We welcome opportunity to demonstrate and discuss its application in the medical profession.

**H. G. Fischer & Co.**
**Chicago, Illinois**
**Booth No. B-16**

To every visitor at the Michigan State Medical Society we give this special invitation: Look under the hood of the new FISCHER models of apparatus shown! FISCHER shockproof x-ray apparatus, short wave units, ultra-violet and other generators are built to stand the very hardest day-by-day usage. Demand to be shown the real under-the-hood facts about FISCHER Models.

**C. B. Fleet Company**
**Lynchburg, Virginia**
**Booth No. E-14**

Phosphe-Soda (Fleet) is a highly concentrated and purified, aqueous solution of sodium phosphates. It is nontoxic, rapid but mild in action without irritation of the gastric or intestinal mucosa. It is indicated for hepatic dysfunction and for its thorough eliminating and cleansing action on the upper and lower gut.

**General Electric X-Ray Corp.**
**Detroit, Michigan**
**Booth No. A-5**

We cordially invite the physicians and their families who attend this meeting to make use of the lounge facilities provided at our booth for their comfort. We particularly look forward to a visit from users of our equipment and a cordial invitation is extended to all physicians who may have technical problems to discuss with our staff in attendance.

**Gerber Products Company**
**Fremont, Michigan**
**Booth No. E-12**

The complete line of Gerber Baby Foods will be on display. There are two precooked dry cereals, one a wheat, the other an oatmeal cereal. Of the canned foods, there are both strained and Junior or chopped foods. Booklets available for distribution to mothers or patients on special diets as well as professional literature will be sent to registrants, for examination.

**Hack Shoe Company** **Booth No. A-2**
**Detroit, Michigan**

Twenty-five years of evolution in health shoe construction will be exemplified in the Hack Shoe Company exhibit.
This pioneer prescription shoe organization will also display a series of roentgenographs demonstrating how the foot bones lie in correctly and incorrectly fitting shoes.
HACK-O-PEDIC clubfoot and surgical shoes and TRI-BANLANCE shoes for men, women and children complete the exhibit.

**Hanovia Chemical & Mfg. Company** **Booth No. C-17**
**Newark, New Jersey**

The very latest in ultra-violet equipment will be demonstrated, including the outstanding uses of ultra-violet radiation in the fields of science, medicine and public health. Don't fail to see our new line of self-lighting ultra-violet high-pressure mercury arc lamps. Short and ultra short wave apparatus, Sollux Radiant Heat Lamps and our latest development, quartz ultra-violet lamps for air sanitation.

**J. F. Hartz Company** **Booths No. E-6 and E-7**
**Detroit, Michigan**

All physicians are invited to visit the booth of the J. F. Hartz Company—the progressive medical supply firm of Detroit who are nationally known.
An interesting display of instruments, equipment, and pharmaceuticals may be seen.
This firm has recently added another floor to care for the expanding business of its manufactured pharmaceuticals which are made under strict laboratory control, and in compliance with the regulations of the Federal Food and Drug Department.

**H. J. Heinz Company** **Booth No. E-18**
**Pittsburgh, Pennsylvania**

The makers of Heinz Strained and Junior Foods appreciate the confidence which the members of the Michigan State Medical Society have expressed in their recommendation of these foods for infant feeding and special diets. F. B. Heard and H. A. Elenbaas are at your service and will welcome members and friends at the exhibit.

**Holland-Rantos Company, Inc.** **Booth No. F-11**
**New York City**

The latest developments in the field of medically prescribed contraceptives will be featured at the booth of the Holland-Rantos Company. Rantex masks and Rantex caps for operating room will be of unusual interest to surgeons who are looking for something comfortable yet efficient in this line.

**The G. A. Ingram Co.** **Booths No. D-21 and D-22**
**Detroit, Michigan**

The G. A. Ingram Company extends an invitation to all visitors at the Michigan State Medical Convention to make their booth their headquarters and, especially, to investigate their new line of diagnostic instruments and their complete line of genuine Swedish stainless steel instruments. They will also show the latest in electrical equipment.

**Jones Metabolism Equipment Company** **Booth No. D-5**
**Chicago, Illinois**

Interview our representative, William Niedelson, about the development of the first waterless basal through 20 years by the addition of many scientific devices to assure accuracy, operative simplicity and guarantee the purchaser a lifetime of use without repair expense.

**"The 'Junket' Folks"** **Booth No. B-3**
**Chr. Hansen's Laboratory**
**Little Falls, New York**

"THE 'JUNKET' FOLKS" will serve rennet-custards made with either "Junket" Rennet Powder or "Junket" Rennet Tablets. There is also a display of "Junket" Brand Food Products. Enlarged photographs show how the rennet enzyme in rennet-custards transforms milk into softer, finer curds. Rennet-custards are widely recommended for infants, children, convalescents, postoperative cases and as a delicious, healthful dessert for the whole family. Fully informed attendants on duty.

**Kalak Water Company** **Booth No. E-17**
**New York City**

Visit the **KALAK WATER** booth and ask the representative how KALAK WATER may be employed to minimize the discomforts that so frequently follow the administration of the Sulfonamides. Ask the representative to serve you with a glass of KALAK WATER and learn for yourself how delicious and refreshing KALAK WATER really is when it is properly served.

**Lea & Febiger** **Booth No. D-14**
**Philadelphia, Pennsylvania**

Lea & Febiger will exhibit Portis' Digestive Diseases, Kraines' Psychoses, Ballenger's Manual, Rowe's Elimination Diets, Lewin's The Foot and Ankle, Rony's Obesity and Leanness and new editions of Holmes and Ruggles' Roentgenology, Joslin's Diabetes and Manual, Comroe's Arthritis, Bridges' Dietetics, Spaeth's Ophthalmology and Kessler's Accidental Injuries.

**Lederle Laboratories** **Booth No. E-22**
**New York City**

You are cordially invited to visit the Lederle Exhibit which will feature colored slides on the refining of Antitoxins. These slides were taken from a new motion picture film on this subject.
They will exhibit the many specialties for which they are noted and the latest releases in Sulfonamide drugs. Literature on the various Sulfonamides will be available.

**Libby, McNeill & Libby** **Booth No. B-17**
**Chicago, Illinois**

You are cordially invited to visit Libby, McNeill & Libby's exhibit where attendants will point out the merits of Homogenized Baby Foods, Chopped Foods and Evaporated Milk. Libby's special method of Homogenization makes Libby's Baby Foods extra smooth, extra easy to digest.

**Liebel-Flarsheim Company** **Booth No. C-7**
**Cincinnati, Ohio**

Liebel-Flarsheim Company will exhibit the well-known L-F Short Wave Generators as well as the famous Bovie Electro-Surgical Units and other new and interesting electro-medical apparatus.
A cordial invitation is extended to visit The Liebel-Flarsheim booth to inspect this outstanding equipment and have it demonstrated to you.

**Eli Lilly and Company** **Booth No. C-1**
**Indianapolis, Indiana**

Eli Lilly and Company will demonstrate the germicidal efficacy of "Merthiolate" (Sodium Ethyl Mercuri Thiosalicylate, Lilly) and the compatibility of the antiseptic with body cells and fluids. Other new and useful products will be featured.

**J. B. Lippincott Company** **Booth No. E-11**
**Philadelphia, Pennsylvania**

New Lippincott books of interest to every physician are Grollman's "Essentials of Endocrinology," Tobias' "Essentials of Dermatology," Haden and Thomas' "Allergy in Clinical Practice" and Youmans' "Nutritional Deficiencies." Leaman's "Management of the Cardiac Patient," today's sales leader, will be displayed, as will Thorek's three-volume "Modern Surgical Technic."

**The McKesson Appliance Company** **Booth No. D-20**
**Toledo, Ohio**

The McKesson Appliance Co. will exhibit a complete line of scientific equipment involving the uses of anesthetic gases and oxygen therapy. Both waterless and water spirometer type basal metabolism units will be shown. Practical demonstrations will be made on the new direct reading electrocardiograph.

**M & R Dietetic Laboratories, Inc.** **Booth No. C-11**
**Columbus, Ohio**

Similac, a completely modified milk especially prepared for infants deprived either partially or entirely of breast milk, will be featured. Mr. David O. Cox and Mr. L. A. MacDonald will appreciate the opportunity to discuss the merits of Similac and its suggested application for both the normal and special feeding cases.

**Mead Johnson & Company** **Booths No. C-21 and C-22**
**Evansville, Indiana**

"Servamus Fidem" means We Are Keeping the Faith. Almost every physician thinks of Mead Johnson & Company as the maker of Dextri-Mal-

tose, Pablum, Oleum Percomorphum and other infant diet materials. But not all physicians are aware of the many helpful services this progressive company offers physicians. A visit to Booths C-21 and C-22 will be time well spent.

**Medical Arts Surgical Supply Company**
**Grand Rapids, Michigan Booths No. C-5, C-6 and B-14**

The Medical Arts Surgical Supply Company of the best city will show the exclusive line of Liebel Flarsheim short wave generators, the latest items in the beautiful Ritter ear, nose and throat equipment, and a complete suite of the Hamilton Nu Tone furniture along with the latest in autoclave and sterilized units. An invitation is extended to all doctors to call at these booths.

**Medical Case History Bureau** **Booth No. D-9**
**New York City**

Simplifying the Doctor's History Record and Bookkeeping System with the INFO-DEX RECORD CONTROL SYSTEM.
Maintenance of accurate, informative data on both history and financial records is essential in the modern doctor's practice. The INFO-DEX Record Control System helps to keep a constant finger on the physical and financial pulse of the patient. This system correlates information almost automatically for instant reference and research work. Its method of cross-indexing interesting cases according to the disease is unique and exclusive.

**The Medical Protective Company** **Booth No. D-8**
**Fort Wayne, Indiana**

The Medical Protective Company invites you to visit its booth. Medical Protective Service is an institution of the Medical profession whose legal liability problems we have concentrated upon for 42 years. Bring your professional liability questions and problems to us.

**Mellin's Food Company** **Booth No. E-15**
**Boston, Massachusetts**

Physicians are cordially invited to call and to place before our repesentatives all questions regarding the composition of Mellin's Food and its usefulness in infant and adult feeding. It is suggested that constipation in infancy and the preparation of nourishment for adult patients who are far below normal as a result of prolonged illness or faulty diet are particularly interesting topics for discussion.

**The Mennen Company** **Booth No. A-1**
**Newark, New Jersey**

The Mennen Company will exhibit their two baby products—Antiseptic Oil and Antiseptic Borated Powder. The Antiseptic Oil is now being used routinely by more than 90 per cent of the hospitals that are important in maternity work. Be sure to register at the Mennen exhibit and receive your kit containing demonstration sizes of their shaving and after-shave products; also, for the lucky number prize drawing to be held at the close of the Convention for DeLuxe Fitted Leather Toilet Kits.

**The Wm. S. Merrell Company** **Booth No. B-2**
**Cincinnati Ohio**

The Merrell exhibit will feature Oravax, the oral catarrhal vaccine in enteric coated tablets for protection against the common cold; as well as other new prescription specialties of timely interest. Merrell representatives will be at the booth ready to show these products and answer any question.

**Michigan Medical Service** **Booth No. A-6**
**Michigan Hospital Service**
**Detroit, Michigan**

Complete information about the Medical Service and Surgical Benefit Plans of Michigan Medical Service will be available in this featured exhibit of the results of operation of the doctors' prepaid group medical service program.
There will also be an interesting display of the working of the companion hospital service plan of Michigan Hospital Service.

**The C. V. Mosby Company** **Booth No. D-3**
**St. Louis, Missouri**

Physicians and surgeons interested in the new developments in medicine and surgery are cordially invited to inspect the new publications which will be on display at the Mosby Booth. Outstanding new volumes on surgery, dermatology, pediatrics, gynecology, heart diseases, X-Ray, and practice of medicine will be shown.

**National Live Stock and Meat Board** **Booth No. B-12**
**Chicago, Illinois**

The exhibit of the National Live Stock and Meat Board will portray Meat as a source of the essential food elements, protein, fats, carbohydrates, calcium, phosphorus, iron, copper and six vitamins with special emphasis on the factors of the vitamin B complex.

**Nestle's Milk Products, Inc.** **Booth No. D-19**
**New York City**

The Nestle's Milk Products, Inc., exhibit will feature Lactogen which has given successful results in infant feeding for more than 15 years. Mr. J. B. Gibbs will be in charge of the exhibit.

**Parke, Davis & Company**
**Deroit, Michigan** **Booths Nos. C-12, C-13 and C-14**

Featured in the Parke-Davis exhibit will be the sex hormones, theelin and theelol; antisyphilitic agents, such as mapharsen and Thio-Bismol; posterior lobe preparations, including pituitrin, pitocin and pitressin; and various adrenalin chloride preparations.

**Pelton & Crane Company** **Booth No. D-4**
**Detroit, Michigan**

The Pelton & Crane Company will exhibit its complete line of office sterilizers, autoclaves and operating lights; also, fountain cuspidors and other specialty items. The exhibit will be in charge of Mr. C. K. Vaughan, who looks forward to the pleasure of renewing old acquaintances.

**Pet Milk Sales Corporation** **Booths Nos. C-9 and C-10**
**St. Louis, Missouri**

An actual working model of a milk condensing plant in miniature will be exhibited by the Pet Milk Company. This exhibit offers an opportunity to obtain information about the production of Irradiated Pet Milk and its uses in infant feeding and general dietary practice. Miniature Pet Milk cans will be given to each physician who visits the Pet Milk Booth.

**Petrolagar Laboratories, Inc.** **Booth No. D-2**
**Chicago, Illinois**

Petrolagar Laboratories, Inc. offer, in addition to samples of the Five Types of Petrolagar, an interesting selection of descriptive literature and anatomical charts. Ask the Petrolagar representatives to show you the HABIT TIME booklet. It is a welcome aid for teaching bowel regularity to your patients.

**Philip Morris & Company** **Booth No. E-1**
**New York City**

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject, and problems on the physiological effects of smoking.

**Picker X-Ray Corporation** **Booth No. B-10**
**New York City**

Visitors to the Picker X-Ray Corporation's booth will have an opportunity of seeing the well-known Picker-Waite "Century." This diagnostic unit provides for radiography and fluoroscopy in all positions from the vertical to the Trendelenburg—either hand or motor operated. Also on display will be a fine example of a combination portable and mobile shockproof x-ray unit. This apparatus is suitable for general office use or portable work in the pa-

tient's home. A number of newly developed x-ray accessories and diagnostic opaque chemicals will be exhibited.

**Professional Management** **Booth No. F-2**
**Battle Creek, Michigan**

Bring your professional and business problems for Free Consultation Service with any of the Professional Management staff. Henry C. Black and Allison E. Skaggs, Battle Creek; Wendell A. Persons, Saginaw; Willis B. Mallory, Detroit; and Morris C. Flanders, Grand Rapids, will all be available to members of the Michigan State Medical Society.

**Riedel-de Haen, Inc.** **Booth No. B-6**
**New York City**

The Riedel-de Haen exhibit will feature two chemically pure bile acids: Decholin, the true choleretic, and Degalol, the fat emulsifier. Physicians are invited to register for abstracts of clinical reports on these products. Attending representatives will appreciate the opportunity to discuss the latest developments in the therapeutic application of chemically pure bile acids.

**S.M.A. Corporation** **Booth No. D-1**
**Chicago, Illinois**

Among the technical exhibits at the convention this year is an interesting new display, which represents the selection of infant feeding and vitamin products of the S.M.A. Corporation. Physicians who visit this exhibit may obtain complete information, as well as samples, of S-M-A Powder and the special milk preparations—Protein S-M-A (Acidulated), Alerdex and Hypo-Allergic Milk.

**Sandoz Chemical Works, Inc.** **Booth No. D-15**
**New York City**

This exhibit will stress Council-accepted products: Gynergen (ergotamine tartrate) for migraine and uterine hemostatis; Digilanid, the crystallized initial glycosides of Digitalis lanata, standardized gravimetrically and biologically; Scillaren and Scillaren-B, pure cardiodiuretic squill principles, and Dandoptal, an effective hypnotic. Also the original gluconate preparations of calcium (Calglucon) for oral and parenteral therapy.

**W. B. Saunders Company** **Booth No. B-1**
**Philadelphia, Pennsylvania**

Of particular interest are such new books as Ladd & Gross' "Abdominal Surgery in Infancy and Childhood," Kilmer & Tuft's "Clinical Immunology, Biotherapy and Chemotherapy," Steinbrocker's "Arthritis," Johnstone's "Occupational Diseases," Graybiel & White's "Electrocardiography in Practice," Krusen's "Physical Medicine," Novak's "Obstetrical and Gynecological Pathology," Walters & Snell's "The Gallbladder and Its Diseases," the 1941 Mayo Clinic Volume, Griffith & Mitchell's "Pediatrics," and a number of other important new books and new editions.

**Schering Corporation** **Booth No. E-2**
**Bloomfield, New Jersey**

The Schering exhibit includes real and striking recent advances such as SULAMYD, highly effective sulfacetimide of considerably lower toxicity; **orally** active sex hormones, ORETON-M, PROGYNON-DH and PRANONE tablets; efficient BARAVIT for bulk laxative therapy; and the new physiological antacid, LUDOZAN tablets, forming a true protective gel in your patient's stomach.

**Scientific Sugars Company** **Booth No. C-15**
**Columbus, Indiana**

Scientific Sugars Company will display Cartose, Hidex, and the Kinney line of nutritional products. Physicians are cordially invited to stop. Well informed representatives will be in attendance.

**Sharp & Dohme** **Booth No. D-12**
**Philadelphia, Pennsylvania**

Sharp & Dohme will show their new modern display this year, featuring "Delvinal" Sodium, "Lyovac" Normal Human Plasma, "Lyovac" Bee Venom Solution, and other "Lyovac" biologicals. There will also be on display a group of new biological and pharmaceutical specialties prepared by this house, such as "Propadrine" Hydrochloride products, "Rabellon," "Padrophyll," "Riona," "Depropanex" and "Ribothiron." Capable well-informed representatives will be on hand to welcome all visitors and furnish information on Sharp & Dohme products.

**Smith, Kline & French Laboratories** **Booth No. E-10**
**Philadelphia, Pennsylvania**

This year, Smith, Kline & French Laboratories begins its second century of service to the medical profession. The members of the Michigan State Medical Society are cordially invited to visit this exhibit and discuss the products displayed. These will include benzedrine inhaler, benzedrine sulfate tablets, benzedrine solution, and pentnucleotide.

**Frederick Stearns & Company**
**Detroit, Michigan** **Booths No. D-10 and D-11**

Doctors are cordially invited to visit our attractive convention booths, to view and discuss outstanding contributions to medical science developed in the Scientific Laboratories of Frederick Stearns & Company.
Our professional representatives will be pleased to supply all possible information on the use of such outstanding products as Neo-Synephrin Hydrochloride for intranasal use, Mucilose for bulk and lubrication, Ferrous Gluconate, Potassium Gluconate, Gastric Mucin, Susto, Trimax, Appella Apple Powder, Nebulator with Nebulin A, and our complete line of vitamin products, together with liver extract U.S.P., oral and subcutaneous for the treatment of pernicious anemia as well as other products will be readily available.

**E. R. Squibb & Sons** **Booth No. D-13**
**New York City**

A number of new and interesting chemotherapeutic specialties, vitamin, glandular and biological products will be featured in the Squibb Exhibit. Well informed Squibb Representatives will be on hand to welcome you and to furnish any information desired on the products displayed.

**U. S. Standard Products Company** **Booth No. C-20**
**Woodworth, Wisconsin**

MAGSORBAL will be on display by the U. S. Standard Products Company at the State Medical Meeting in Grand Rapids. Have our representative tell you about the merits of this product. Other items of great interest will be on display.

**Wall Chemicals Corporation** **Booth No. E-3**
**Detroit, Michigan**

Wall Chemicals Corporation, a division of the Liquid Carbonic Corporation, will have on display a quantity of compressed gas anesthetics and resuscitants. There will also be a complete line of oxygen therapy equipment including the "Walco" oxygen humidifier, for the nasal administration of oxygen, and the "Walco" oxygen face mask.

**Westinghouse X-Ray Co., Inc.** **Booth No. C-19**
**Detroit, Michigan**

The Westinghouse X-Ray Division will display the most recent development of compact x-ray equipment. Considering the size, there is greater power than heretofore. The recently publicized bactericidal "Sterilamp" and "Thin Window Lamp" will be available for examination. The "Scialytic," standard of surgical lighting will be shown in the latest models.

**White Laboratories, Inc.** **Booth No. E-9**
**Newark, New Jersey**

White Laboratories, Inc., will present White's Cod Liver Oil Concentrate Liquid, Tablet and Capsule (and White's Thiamin Chloride Tablet)—all Council-accepted.
The practical advantages provided by cod liver oil concentrate as an economical and convenient measure of vitamins A and B prophylaxis and therapy will be discussed. Pertinent information concerning our newer knowledge of the vitamins and vitamin deficiency states will be offered for consideration.

**Winthrop Chemical Company, Inc.** **Booth No. C-8**
**New York City**

A cordial invitation is extended to every member of the Michigan State Medical Society to visit Booth No. C-8 where representatives will gladly discuss the latest preparations made available by this firm. You will receive valuable booklets dealing with anesthetics, analgesics, antirachitics, antispasmodics, antisyphilitics, diagnostics, diuretics, hypnotics, sedatives and vasodilators.

**John Wyeth & Brother, Inc.** **Booth No. A-3**
**Philadelphia, Pennsylvania**

You are cordially invited to visit the John Wyeth and Brother exhibit where the following pharmaceutical specialties will be on display:

Amphojel, Wyeth's Alumina Gel, for the control of hyperacidity and peptic ulcer. Wyeth's Hydrated Alumina Tablets, for the convenient control of hyperacidity. Kagomagma, Wyeth's magma of alumina and kaolin, for the control of diarrhea. B-Plex, Wyeth's Vitamin B Complex Elixir. A-B-M-C Ointment, the rubefacient, counter-irritant, for the relief of arthritic pain. Bepron, Wyeth's Beef Liver with iron. Bewon Elixir, Wyeth's palatable appetite stimulant.

**Zimmer Manufacturing Company** **Booth No. E-20**
**Warsaw, Indiana**

A complete line of fracture equipment will be on display. Your factory representative, Mr. Fisher, will be pleased to see you, and demonstrate any item. Of special interest—a sterilizable bone plate and screw container which should be seen, the new S-M-O Bone Plates and Screws, a screw driver that is different, and the Luck Bone Saw complete with all attachments.

————MSMS————

### HOUSE OF DELEGATES, 1941 REFERENCE COMMITTEES

**Credentials Committee**

Luther W. Day, M.D., **Chairman**
C. W. Oakes, M.D.
V. Vandeventer, M.D.
P. W. Kniskern, M.D.

**On Officers' Reports—Parlor B, Pantlind Hotel**

H. F. Dibble, M.D., **Chairman**
G. H. Yeo, M.D.
Carl F. Snapp, M.D.
C. A. Dickinson, M.D.
M. G. Becker, M.D.

**On Reports of the Council—Room 122, Pantlind Hotel**

E. D. Spalding, M.D., **Chairman**
Don V. Hargrave, M.D.
Frank E. Reeder, M.D.
E. N. D'Alcorn, M.D.
A. T. Hafford, M.D.
Wm. D. Barrett, M.D.

**On Reports of Standing Committees—Room 124, Pantlind Hotel**

Dean W. Myers, M.D., **Chairman**
Harvey Hansen, M.D.
Douglas Donald, M.D.
J. M. Robb, M.D.
Henry Cook, M.D.
Don W. Thorup, M.D.
Merle Wood, M.D.
A. E. Stickley, M.D.
C. E. Toshach, M.D.

**On Reports of Special Committees—Room 126, Pantlind Hotel**

Geo. H. Southwick, M.D., **Chairman**
Geo. J. Curry, M.D.
Irving Greene, M.D.
C. T. Ekelund, M.D.
Ellery Oakes, M.D.
C. F. De Vries, M.D.

**On Amendments to Constitution and By-Laws—Room 127, Pantlind Hotel**

E. W. Foss, M.D., **Chairman**
A. E. Catherwood, M.D.
C. L. Hess, M.D.
W. R. Young, M.D. .
W. F. Strong, M.D

**On Resolutions—Room 128, Pantlind Hotel**

W. B. Cooksey, M.D., **Chairman**
L. G. Christian, M.D.
S. L. Loupee, M.D.
W. H. Alexander, M.D.
A. V. Wenger, M.D.

**Reference Committee Reports are to be submitted to the House of Delegates in triplicate.**

# ■ COMMITTEE REPORTS ■

## SUMMARY OF PROCEEDINGS OF HOUSE OF DELEGATES, 1940

The seventy-fifth annual meeting of the House of Delegates of the Michigan State Medical Society was held at Detroit, September 24, 1940.

The House of Delegates:

1. Accepted and adopted with thanks the reports of the President (872*), President-Elect (872); The Council (872), Delegates to the AMA (872), Legislative Committee (872), Public Relations Committee (873), Representatives to Joint Committee on Health Education (873), Cancer Committee (873), Postgraduate Medical Education Committee (873), Ethics Committee (873), Preventive Medicine Committee (873), Heart and Degenerative Diseases Committee (874), Industrial Health Committee (874), Syphilis Control Committee (873), Tuberculosis Control (873), Mental Hygiene Committee (874), Child Welfare (including Iodized Salt) Committee (874), Maternal Health Committee (873), Committee on Distribution of Medical Care (884), Radio Committee (876), Scientific Work Committee (876), Conference Committee on Prelicensure Medical Education (877), Medical-Legal Committee (873), Advisory Committee on Nurses Training Schools (876), and Membership Committee (876).

2. Referred to the 1941 session of the House of Delegates the following proposed amendments to the Constitution and By-Laws of the M.S.M.S.:

(a) Constitution: Article IV, Section 3, re making past-presidents ex-officio members of House of Delegates, without power to vote, (877).

(b) Constitution: Article IX, Section 4, re finances (877). Reference Committee recommended that this proposed amendment be rejected.

(c) Constitution: New Article XII and renumber present Article XII to No. XIII, re definitions of "sessions and meetings" (880).

(d) By-laws: Chapter 10, Section 1, re Amendments (880).

3. Elected the following to Emeritus Membership (881): Drs. W. J. O'Reilly, Saginaw; Donald K. MacQueen, Laurium; George Bates, Kingston; Leslie A. Howe, Breckenridge; James H. Sanderson, Detroit; and Frank P. Bohn, Newberry.

To Retired Membership: Drs. C. S. Sackett, Charlotte; E. M. Cooper, Rockwood; Mark S. Knapp, Lake Fenton; C. S. Sutherland, Clarkston; James W. Wallace, Saline; James F. Breakey, Ann Arbor; W. E. Wilson, and T. W. Hammond, Grand Rapids.

To Associate Membership: Mr. John R. Mannix, Detroit.

To Honorary Membership (Posthumous): Stuart Pritchard, M.D.

4. Presented scroll to Philip A. Riley, M.D., for his services to the Michigan medical profession (863).

5 Amended Constitution:

(a) Article III, Sections 1, 2, 3, 4, and 8; Added two new sections, all with regard to membership classification (878-879).

(b) Article IV, Section 3, re membership of Society officers in House of Delegates (878).

(c) Article III, Sections 1 and 2, re Junior Members.

6. Approved Resolutions concerning:

(a) Public Relations (872)

(b) Genito-Infectious Disease Program (883)

(c) Change in name of O.M.C.O.R.O. Society to "Medical Society of North Central Counties" (882)

(d) Beaumont Bridge (882)

(e) New Gavel to Speaker (881)

7. Disposed of other Resolutions as follows:

(a) Proposed Amendment to Afflicted Children's Act

was referred to the M.S.M.S. Legislative Committee.

(b) Maternal Health Resolution was not adopted.

(c) General Practitioners in Hospitals Resolution was referred to the M.S.M.S. Committee on Distribution of Medical Care.

8. Referred to The Council the matter of the unsatisfactory convention accomodations at the 1940 meeting.

9. Elected:

(a) C. E. Umphrey, M.D., Detroit, Councilor of 1st District (887)
(b) Philip A. Riley, M.D., Jackson, Councilor of 2nd District (884)
(c) Wilfrid Haughey, M.D., Battle Creek, Councilor of 3rd District (885)
(d) Otto O. Beck, M.D., Birmingham, Councilor of 15th District (885)
(e) A. S. Brunk, M.D., Detroit, Councilor of 16th District (885)
(f) Henry A. Luce, M.D., Detroit, Delegate to A.M.A. (885)
(g) T. K. Gruber, M.D., Eloise, Delegate to A.M.A. (885)
(h) Frank E. Reeder, M.D., Flint, Delegate to A.M.A. (886)
(i) C. R. Keyport, M.D., Grayling, Delegate to A.M.A. (886)
(j) Carl F. Snapp, M.D., Grand Rapids, Alternate Delegate to A.M.A. (886)
(k) C. S. Gorsline, M.D., Battle Creek, Alternate Delegate to A.M.A. (886)
(l) R. H. Denham, M.D., Grand Rapids, Alternate Delegate to A.M.A. (886)
(m) Henry R. Carstens, M.D., Detroit, President-Elect (886)
(n) O. D. Stryker, M.D., Fremont, Speaker, House of Delegates (886)
(o) James J. O'Meara, M.D., Jackson, Vice Speaker, House of Delegates (887)

10. Thanked Wayne County Medical Society, et al., for contributing to success of meeting. (887)

———MSMS———

## PROPOSED AMENDMENTS TO CONSTITUTION AND BY-LAWS OF MICHIGAN STATE MEDICAL SOCIETY

The following amendments were presented at the 1940 Convention and according to the Constitution were referred to the 1941 Session of the House of Delegates for final consideration:

### Constitution

1. Amend Article IV, Section 3 to read as follows: "The officers of this Society, Past Presidents, and Members of The Council shall be ex-officio members of the House of Delegates without power to vote."

Comment: This amendment adds the past presidents of the Michigan State Medical Society to the ex-officio members of the House of Delegates.

2. Amend Constitution, Article IX, Section 4, to read as follows: "The Secretary shall collect all annual dues and all monies owing to the Society, depositing them in an approved depository and disbursed by him upon order of The Council, or invested by him in United States Government bonds with approval of The Council."

Comment: The Reference Committee, in 1940, recommended that this proposed amendment re finances be rejected.

3. Amend Article XII, Section 1 to read as follows: "The House of Delegates may amend any article of this constitution by a two-thirds vote of the Delegates seated at any annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been published at least once during the year in the Journal of the Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken."

Comment: This amendment changes the word "present" to "seated." See next amendment re "Sessions and Meetings."

4. Amend Constitution by adding a new article to be known as Article XII:

"SESSIONS AND MEETINGS

"Section 1. A session shall mean all meetings at any one call.

"Section 2. A meeting shall mean each separate convention at any one session."

Comment: This new Article is for the purpose of clarifying what is meant by the terms "sessions and meetings."

5. Amend the Constitution by renumbering old Article XII to "XIII."

### By-Laws

6. Amend By-Laws, Chapter 10, Section 1, to read as follows: "These By-Laws may be amended by a majority vote of the delegates present, after the proposed amendment is laid on the table for one meeting. These By-Laws become effective immediately upon adoption."

Comment: This amendment consists of substituting the word "meeting" for the word "session" to bring the By-Laws in conformity with the Constitution upon the adoption of above proposed amendments, thereto.

———MSMS———

## ANNUAL REPORT OF THE COUNCIL, M.S.M.S., 1940-41

Since the 1940 House of Delegates adjourned, The Council has convened four times (up to September 16, 1941) and the Executive Committee ten times, a total of fourteen meetings. As in past years, all the business of the Society, including matters studied and recommendations made by the twenty-two committees of the M.S.M.S., were routinely referred to The Council or its Executive Committee for consideration, approval, and action.

### Membership

Members in good standing as of July 31 and as of December 31, for the years 1935 to 1941, inclusive, are indicated in the following chart:

| | 1941 | 1940 | 1939 | 1938 | 1937 | 1936 | 1935 |
|---|---|---|---|---|---|---|---|
| July 31 | 4,403 | 4,401 | 4,255 | 3,958 | 3,757 | 3,457 | 3,410 |
| December 31 | | 4,527 | 4,425 | 4,205 | 3,963 | 3,725 | 3,653 |

The scientific and sociologic progress of the M.S.M.S. is best indicated by the unusual increase in membership made during the last six years.

### Finances

The society closed its books for the last fiscal year on December 24, 1940. An audit by Ernst & Ernst was published in THE JOURNAL in February. Reference to this report will disclose the sound financial condition of the Society.

The 1941 budget was drawn by the Finance Committee of the Council at the annual meeting in January. This was studied by the entire Council and after thorough discussion was adopted. The policy behind the budget was to place a ceiling on invested funds and to return to the membership the largest service possible.

The plan of keeping invested funds in high grade bonds is being continued. The listed price of these securities are studied at the meetings of the Council and its Executive Committee and occasional changes are made when necessary. Since the close of the fiscal year funds in substantial amounts have been invested in U. S. Government Bonds.

Comparison of expenditures to budgetary allotments is made periodically by the Executive Committee of

The Council and the budget is followed rather strictly unless altered circumstances demand changes. In general, the expenses are being kept well within the budget.

### The Journal

The Publication Committee believes a free copy of THE JOURNAL should be sent to each hospital in the state which has interns or resident physicians, this to be done as an educational matter to promote interest in Medical Society Memberships and the activities of organized medicine.

The Publication Committee believes that the Society should make some real investment in THE JOURNAL. It believes in the increased earnings of THE JOURNAL but feels that it should also render an increased service by making more publication space available for original articles and by the publication of various society activities. These provisions would increase the size and usefulness of THE JOURNAL.

While keeping the cost of THE JOURNAL within the previous budget further enhancements to the appearance and value of THE JOURNAL have been made during the past year.

The quality of the scientific papers has been uniformly good, and continuous effort is being made to keep them from being too verbose and to have them well illustrated. Only papers which are of interest to the practicing physician are accepted. No papers are accepted from non-members unless they have been delivered before meetings held in this state. Abstracts of all papers published are sent to the other state medical journals in order to provide the widest possible dissemination of the products of our members. These have been well received.

No opportunity has been spared to make THE JOURNAL a more beautiful and attractive magazine. The use of green tinted paper, a new cover design, provision of new departments, and the frequent use of cuts and cartoons have been utilized. The advertising has been kept on the same high standard of previous years.

The editorial policy has been determined but has avoided compromising the State Medical Society.

Considerable space is used for publicizing and coordinating the activities of the various committees. The activities of the Michigan State Medical Society and every important decision or action by its officers is explained in THE JOURNAL. The answer to practically every question asked regarding the state society and its activities can be answered from THE JOURNAL pages.

Important action and expressions from other state societies are also found on its pages.

### County Societies

Interest by our county societies in scientific and civic matters is gratifying. The activity of local legislative key-men materially eased the task of our Legislative Committee during the past session at Lansing.

The program of the postgraduate education continues to be well accepted, but in view of the excellence of the subject matter and the rapid dissemination of advanced scientific knowledge by means of these lectures, an attempt should be made to increase attendance. To this end it is suggested that county society secretaries actively coöperate with their councilors just preceding and during each fall and spring term of the program.

The M.S.M.S. Secretary's Letter was sent periodically to county society presidents and secretaries and four times during the year to all members.

### Michigan Medical Service

The progress of Michigan Medical Service in the past year will be reported only in brief, as a detailed report will be presented to the membership of the corporation (which includes all members of the House of Delegates).

The ready acceptance of the plan by our citizens has resulted in the rather rapid growth of Michigan Medical Service. On December 31, 1940, there was a total of 117,550 individuals enrolled in the various plans. On July 1, 1941, there was a total of 184,258 individuals availing themselves of the benefits of Michigan Medical Service.

The Board of Directors and its Executive Committee have met at frequent intervals during the past year and have devoted a good deal of time to the supervision of the affairs of the corporation. It is believed that the benefits to the many individuals subscribing to one of the plans have resulted in a substantial betterment of their health. The physicians of the state have also found it satisfactory in that the patients were able to avail themselves of necessary medical services when they were needed, without the prospect of a large bill to be paid.

At the meeting of the A.M.A. House of Delegates in Cleveland in June, 1941, resolutions were adopted recommending medical societies to experiment with the principles of prepaid medical care and making a definite provision for studies and the setting up of uniform standards under the direction of the Bureau of Medical Economics of the A.M.A.

In view of the general interests of the profession throughout the United States and the steps that have been taken by many state and county societies in starting similar plans (many have visited the offices of Michigan Medical Service to seek information and advice) it is believed that this step is one of real importance.

### Organization

Two new councilors were elected by the 1940 House of Delegates: C. E. Umphrey, M.D., Detroit, First District, succeeding Henry R. Carstens, M.D., who was chosen as President-elect of the State Society; and Philip A. Riley, M.D., Jackson, Second District, to succeed J. Earl McIntyre, M.D., whose term expired.

From October, 1940, through January, 1941, fourteen District Meetings were held throughout the state covering all Councilor Districts and all county medical societies. Good organization in the eighty-three counties has been maintained, and the county societies seem to be appreciative of the State Society's efforts to assist them with their problems.

The Secretaries' Conferences of September 25, 1940, on the occasion of the Annual Meeting in Detroit, and on January 19, 1941, in Lansing, were well attended, and aided in imparting information and enthusiasm to the officers of our component societies.

### Committees

The volume of work done by the State Society during 1940-41 is best indicated by the annual reports of the M.S.M.S. Committees. The Council is grateful to all committee chairmen and members for outstanding services performed in behalf of the 4,527 members of the State Society.

*Scientific Work.* The extraordinarily fine program arranged for the 76th Annual Meeting of the Michigan State Medical Society is best evidence of the praiseworthy activity of the Committee on Scientific Work. The inauguration of Discussion Conferences, following the General Assemblies of Wednesday and Thursday, will give opportunity to our Michigan men to discuss their cases and findings with guest-essayists.

*Legislative.* This was a legislative year, and the Legislative Committee's work was the most important sustained activity of the State Society in 1941. A total of 51 bills of interest to the practitioner of medicine had to be watched and guided by your Legislative Committee whose report is worthy of considera-

tion by every Michigan practitioner. Eighteen weekly legislative bulletins and three special letters, sent to some 350 keymen throughout the State, kept the profession informed on legislative activity. The Society's position of leadership in medical matters demands an ever-increasing interest in state affairs, reaching an apex in the legislative session every second year. Continuous contracts with, and appreciation of the legislator's co-operation is indicated. A recommendation on this subject follows.

All other State Society committees functioned well during the past twelve months, as indicated by their individual reports published in the Handbook for Delegates.

Thanks are again extended to all committee chairmen and members, without whose work the State Society would not have made the progress it has.

### Contacts with Governmental Agencies

Contacts with agencies of government, both Federal and State, continue to be a major, if not the most important function of the Michigan State Medical Society.

*Preparedness:* Medical Preparedness assumed a position of high importance during the past year. The State Society created its Medical Preparedness Committee and recommended the formation of similar committees by county medical societies with the result that fifty-five county preparedness committees now exist, covering all of the eighty-three counties of the state.

During the past twelve months, the State Society's Preparedness Committee was instrumental in stimulating returns of the A.M.A. Medical Preparedness questionnaire so that eighty-three per cent of the Michigan physicians executed this informational document.

A postgraduate course in military medicine was approved as a function of the M.S.M.S. Postgraduate Committee during the year.

The remission of dues of doctors of medicine on active military duty, away from home, was ordered by The Council, upon authority of the House of Delegates; seventy-six Michigan physicians were accorded this remission, as of July 1, 1941.

One thousand eight hundred fourteen (1,814) doctors of medicine on Local, Medical Advisory, and Appeal Boards, are now contributing thousands of hours, *without compensation,* to the federal government as a patriotic duty. The Society appreciates this sacrifice of time, effort and expense, and expresses its gratitude to those who are thus so effectively serving their country.

The depletion of physicians in certain areas of Michigan is a problem which has been invited to the attention of The Council several times since January 1; in each instance the coöperation of the A.M.A. Medical Preparedness Committee has been sought and proper presentation of the case made to the Sixth Corps Area, U. S. Army. Deferments, in order to obtain substitutes, have been granted in a number of instances. This matter presents a problem to a state like Michigan, with its cut-over areas and uneven distribution of population. The mistakes of 1917-18, in depleting some communities of medical service, should not be repeated in the present emergency.

The Council has surveyed reports listing the reasons why draftees have been rejected by the Selective Service and have concluded, along with others in various parts of the country making similar surveys, that the reason was not non-availability of medical care. A plan of rehabilitation of rejected draftees is indicated, and should receive the serious consideration of the House of Delegates. A recommendation on this subject follows.

*N.Y.A. Health Examination Program:* A health examination of all N.Y.A. trainees, proposed by the National Youth Administration last December, was approved by The Council and put into execution throughout the state. All trainees requiring remedial work have been referred to their family physician for this necessary care.

*Afflicted-Crippled Child:* The administration of these laws, and the need for better legislation, was discussed at every meeting of The Council and its Executive Committee last winter, leading to the drafting of a bill, in coöperation with seven other interested agencies. The introduction and exciting legislative history of this proposal is detailed in the Annual Report of the Legislative Committee. Unfortunately, certain influences in the state caused this model bill's defeat so that the profession must work, for the present, under the 1937 Crippled Child and the 1939 Afflicted Child Laws.

Effective July 1, the 1937 Schedule of Benefits for medical care of afflicted and crippled children will be in operation, with the following limitation made by the Michigan Crippled Children Commission:

"The fee schedule in operation for medical and surgical care of afflicted adults in any particular county shall be the fee schedule for the care of children hereunder in that county when such fees do not exceed the State rate."

County medical societies having special local arrangements whereby medical welfare, including afflicted adult care, is given *at less than cost price,* should give immediate study to definite plans for the early revision of inadequate schedules. A recommendation on this subject follows.

*County Welfare Contracts:* Several progressive county societies developed or renewed county welfare contracts for medical care of indigents, using the per-capita plan. Other county societies are urged to study their county welfare set-ups, and to inform their county welfare officials concerning the advantages of the per-capita plan. Action is indicated in view of the study of medical welfare programs and facilities on which the State Social Welfare Commission is now embarking.

*Medical Practice Act:* Amendments to this 1899 law, to make the Board de jurie instead of de facto as well as to solve the problem of licensure of midwives, is urged on the Michigan State Board of Registration in Medicine. Changes recommended by this department of State will find a more favorable reception by the Legislature than if offered by a voluntary non-governmental agency.

*State Department of Health:* Very cordial relations continue to exist with the State Department of Health. Joint sessions of county society secretaries and public health officers were maintained, in Lansing on January 19, 1941 and in the northern part of the state on July 16, 1941. The educational work of the field representatives in Cancer, Maternal Health, Child Welfare and Pediatrics, was continued during the past year through the coöperative arrangement with the State Health Commissioner. The State Health Department's inspector continued his untiring work in the elimination of illegal practice of medicine, for which he and the Department are highly commended.

### Contacts with Non-Governmental Agencies

The State Society continued to strengthen its friendship with other groups interested in the distribution of medical service to the public, during 1940-41. These included the Michigan Public Health Association, the Michigan State Grange, the American Legion, the Forty & Eight, Veterans of Foreign Wars, the Children's Fund of Michigan, the Michigan Society for Crippled Children, the Michigan Hospital Association, the Michigan Welfare League, the W. K. Kellogg Foundation, Michigan Hospital Service, the American Mutual Alliance and the Association of Casualty and Surety Executives.

*Michigan Hospitals and Medical Payments Plan:* The two organizations last named coöperated in the de-

velopment of a program so that voluntary agreements providing for liens in accident cases for physicans' services was put into effect on March 1, 1941. This program called "Michigan Hospitals and Medical Payments Plan" more definitely assures physicians of payment for their services to those individuals who are injured in accidents, and who, because of their injuries, are indemnified by an insurance carrier. The plan was published in the February, 1941 M.S.M.S. Journal The Council feels that this agreement is one of the major accomplishments of the past year.

The Michigan High School Athletic Association inaugurated during the past year its "Athletic Accident Benefit Plan," to aid high school athletes receive the minimum of medical or dental attendance in case of serious injury during practice or play. Ten thousand boys (no girls) are enrolled under this plan. Only physicians' and dentists' bills are paid. A circular explaining the Athletic Accident Benefit Plan was sent to the officers of all county medical societies last February.

The desirability of Doctors of Medicine serving as physicians to high-school teams is stressed, as the contact with students, their parents, and the faculty is mutually advantageous—a point which has not been overlooked by ambitious cultists through the State!

### Miscellaneous Business

*Intangibles Tax:* The question of the liability of a physician for the payment of that portion of the State Intangibles Tax relating to Accounts Receivable, which are based on *personal service,* was considered by The Council during the past year. A legal opinion on this subject was obtained by the State Society and published in the August issue of THE JOURNAL.

*A.M.A. Delegates:* Several matters, for presentation to the A.M.A. House of Delegates, were discussed by The Council with Michigan's delegates to the A.M.A.; (a) Specialty Board Resolution adopted by the M.S.M.S. House of Delegates in 1940. This was referred by the A.M.A. House of Delegates to its Board of Trustees for such action as the Board may care to take. (b) Resolution re Hospital Privileges for General Practitioners. This was re-referred by the A.M.A. House of Delegates to the Michigan State Medical Society for further consideration and revision. (c) Medical Examination of Draftees. This resolution, urging consideration of reimbursement for physicians, was disapproved by the A.M.A. House of Delegates. (d) A.M.A. Trial. Suggestion that the A.M.A. officers carry this case to the court of last resort was approved by the A.M.A. House of Delegates.

*Beaumont Memorial:* The project of purchasing the house on Mackinac Island made famous by Doctor Beaumont's experiments is resting at the present time in the hope that the price for the property may drop to a point where the Beaumont Memorial Committee feels it may attempt to finance it. If the property can be purchased, the Committee feels it should be presented to the State of Michigan to be cared for by it, inasmuch as the Committee has unofficial assurance that the State Mackinac Island Commission would be glad to receive it and care for the property permanently.

### Progress

*Renewal of M.S.M.S. Charter for thirty years:* Due to a legal technicality, the Michigan Corporations and Securities Commission ruled that the renewal of the M.S.M.S. Charter for another thirty year period must be approved by the members of the State Society, through resolutions passed by all county medical societies. These resolutions have been secured, and a recommendation on the subject of renewing the charter follows.

*Election of AMA Delegates:* The flaw in the election of four Delegates to the AMA one year, and the election of only one Delegate to the AMA the next year, by the M.S.M.S. House of Delegates, together with the annual confusion over the election of Alternate Delegates, was considered by The Council which suggested to the Speaker that he appoint a committee of the House to work out this matter, for presentation in September, 1941. A recommendation on this subject follows.

The Michigan State Medical Society with its component county societies is the *only* organization in this state which exists to protect the physician and his livelihood. During the past five years it has been able to achieve results satisfactory to the forty-five hundred and twenty-seven members of the Society. Eternal vigilance and *professional unity* are vital necessities to our continued enjoyment of freedom.

Unity in the profession means that each individual doctor must help his medical organization by allegiance and support, both financial and by deed. This support is vital to the organization which in turn is necessary to its physician-members and to the people whom they serve.

### Recommendations

*1. That favorable consideration be given to a resolution expressing appreciation and gratitude to members of the Michigan Legislature and to the Governor for their courteous reception extended representatives of the medical profession, and the thoughtful consideration they gave to medical and health measures coming before them.*

*2. That the State Society develop, or join in the development of, some plan of rehabilitation of rejected draftees, in which the physician-patient relationship and free choice of doctor is maintained.*

*3. That county societies having arrangements whereby medical welfare (including afflicted adult) care is given at less than cost price, be urged immediately to study and revise their schedules of benefits so that individual members are not penalized by being forced to perform services at a financial loss.*

*4. That approval be given by the House of Delegates of the resolutions of the State's fifty-five county medical societies recommending renewal of the Charter of the Michigan State Medical Society.*

*5. That the recommendation of the special committee appointed to study the problem of election of delegates and alternate delegates to the AMA, be favorably considered.*

Respectfully submitted,

A. S. BRUNK, M.D., *Chairman*
H. H. CUMMINGS, M.D., *Vice Chairman*
WILFRID HAUGHEY, M.D., *Chairman Publication Committee*
VERNOR M. MOORE, M.D., *Chairman Finance Committee*
E. F. SLADEK, M.D., *Chairman County Societies Committee*
C. E. UMPHREY, M.D.
P. A. RILEY, M.D.
R. J. HUBBELL, M.D.
RAY S. MORRISH, M.D.
T. E. DEGURSE, M.D.
W. E. BARSTOW, M.D.
R. C. PERKINS, M.D.
R. H. HOLMES, M.D.
A. H. MILLER, M.D.
W. H. HURON, M.D.
O. O. BECK, M.D.
O. D. STRYKER, M.D., *Speaker, House of Delegates*
P. R. URMSTON, M.D., *President*
H. R. CARSTENS, M.D., *President-Elect*
L. FERNALD FOSTER, M.D., *Secretary*

## ANNUAL REPORT OF THE M.S.M.S. DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION, 1941

Your delegates to the American Medical Association respectfully submit the following report of the 92nd Annual Meeting of the American Medical Association held in Cleveland, Ohio, June 2 to 6 inclusive:

The House of Delegates of the American Medical Association is composed of representatives of the component state and territorial societies on the basis of membership; one representative each from the respective sections of the Scientific Assembly; one delegate from the Army; one from the Navy; one from the Public Health Service; one from Hawaii, Canal Zone, Porto Rico and Philippines.

The total registration of Doctors of Medicine attending the Session was 7,269. This was 1200 above the attendance in the same city in 1934. By sections, the three highest registrations were in the following order: Practice of Medicine, first, with 2,440 registrants; Surgery, General and Abdominal, second, with 1,147; Obstetrics and Gynecology, third, with 432. There is a total of 16 sections. The recently created Section on Anesthesiology had 127 registrations, while an older section, Pharmacology and Therapeutics, had only 55.

Your attention is called to this tabulation in the interest of the General Practitioner. Those who oppose the establishment of a section for the General Practitioner can well ponder the grounds for objections. If the general practitioners cannot reach third place in registration next year, it will be because they are not aware of their privileges.

Each year sees relatively few changes in the personnel of the House. Death takes a few, many of whom are sorely missed for their cool judgment and insight. During the past year the legislative and administrative section of the AMA suffered great losses in the death of Austin A. Hayden, former Treasurer and Trustee; Charles E. Humiston of Illinois, former President of the Illinois State Society and a member of the Council on Medical Education and Hospitals, 1930-37; Fred Moore of Iowa, a member of the House from 1931 to 1940 and a member of the Council on Medical Education and Hospitals, 1934—died April 8, 1941; Charles B. Reed of Illinois, member of the House from 1933-40; Howard L. Snyder of Kansas, member 1936-40; Charles J. Whalen of Illinois, member of the House from 1920-40.

These men have been closely identified with the activities of the House of Delegates and the delegates from Michigan learned to love and admire them. We wish again to join in the sentiment expressed in a quotation by Dr. Shoulders, Speaker of the House:

> "When a star is quenched on high,
> For ages will its light
> Still travel downward from the sky,
> Shine on our mortal sight.
> So, when a good man dies,
> For years beyond our ken
> The light he leaves behind him lies,
> Upon the path of men."

The House usually has three sessions—Monday, Tuesday and Thursday respectively. Monday is given over to organization, unfinished business and the introduction of new business. Tuesday is occupied with the reports of the Reference Committees, the introduction of further new business and a so-called Executive Session. The Executive Session rarely, if ever, develops anything that could not be considered in a regular session, but the members seem to derive much satisfaction from the air of expectancy and anticipation that prevails.

The first business in the House of Delegates is the election of some Doctor of Medicine to receive the Distinguished Service Award. The Committee on Distinguished Service Awards submits not more than five names to the Board of Trustees. In accordance with Chap. VI, Section 5 of the By-laws, the Board of Trustees selects three out of the five to be nominated to the House of Delegates. For the year of 1941, the House of Delegates elected Dr. James Ewing of New York City.

Following this election the opening speeches by the Speaker of the House, Dr. H. H. Shoulders of Nashville, Tennessee, President Van Etten and President-elect Lahey were made. The Speaker of the House was later commended for his zeal, both in spirit and performance, which makes it possible that the actions of the House reflect an atmosphere in which deliberate judgment and unregimented conclusions prevail. The Speaker stressed the idealism of our profession and referred to the first section of The Principals of Medical Ethics which states that our profession has for its prime object the service it can render to humanity. The Speaker catalogued a few familiar qualities which must continue to characterize our membership: integrity, courage, wisdom, tolerance, ability, and vision. He intimated that if medicine falls from its high estate as a profession to that of a trade it will not be by judicial decree but through a neglect of the eternal values that have made our profession one for which we are proud to live and in which we are content to die.

President Van Etten touched pointedly on a number of matters of great interest to our entire profession. He emphasized the value of Postgraduate Education and the necessity of the physician of today to think in terms of our changing social picture. He also reaffirmed the recommendation of the Association that a national department of health be created under director of cabinet rank. The outstanding contributions of now Past President Van Etten to organized medicine and to the science of medicine will be more fully appreciated as time goes on. His sincerity, his tolerance, his advocacy of safe principles for the guidance of the profession and the establishment of equitable procedures for the distribution of medical care to the underprivileged should ever be remembered as a guide for safe and righteous conduct.

President-elect Lahey stressed that more attention be given to the physical welfare of the association's officers, especially that of the occupant of the Presidency. He also recommended the advisability of keeping young men coming into the House of Delegates. He further referred to the necessity of subordinating all trivialities in the interest of national unity and national preparedness and re-emphasized the unswerving loyalty of the profession to the nation's welfare.

Your delegates were instructed by the House of Delegates of the Michigan State Medical Society in September of 1940 to introduce certain resolutions. The one requesting an appointment of a committee to confer with Specialty Boards regarding the apparent injustice that arises from the requirement of governmental agencies for specialty board certification for performance of many medical services paid for by government funds was introduced by Dr. Christian and referred to the Reference Committee on Miscellaneous Business. This committee reported adversely and recommended that MSMS's resolution be referred to the Board of Trustees for its information and such action as the Trustees may care to take. The House approved the Reference Committee's recommendation.

The Resolution on Hospital Privileges for General Practitioners as developed from the extract of minutes of the Committee on the Distribution of Medical Care at its meeting of May 7, 1941 and later accepted by the Executive Committee and given to the delegates to the AMA to present at the Cleveland meeting, was presented

to the House of Delegates by Dr. Keyport and referred to the Reference Committee on Miscellaneous Business. The phraseology of the preamble was provocative of discussion and the Reference Committee recommended that the resolution be returned to the Michigan State Medical Society for further consideration and revision. This recommendation the House approved.

A resolution referred to the delegates by the Executive Committee of the Michigan State Medical Society as a result of a resolution adopted by the Committee on Distribution of Medical Care recommending pay for the medical examinations of selectees was introduced by Dr. Gruber along with a similar resolution from the State of New York. This was referred to the Reference Committee on Military Preparedness and was disapproved. The House approved the disapproval.

In addition, your delegates have the right to introduce other resolutions which in their judgment have merit, and accordingly, at the request of the Section on General Practice of the Wayne County Medical Society, a resolution was introduced by Dr. Luce requesting the creation of a section on general practice. This was referred to the Reference Committee on Sections and Section Work. The following is quoted from their report: "Resolution requesting the Creation of a Section on General Practice: Careful consideration was given to the question of establishing a new 'section for the general practitioner'. This was felt by the Council on Scientific Assembly to be undesirable. Your reference committee discussed the matter in connection with the resolution presented by Dr. Luce and submits to this House its belief that an experimental "session" in The Section on Miscellaneous Topics be established for the purpose of testing out the plan at the next session of the Association. If successful in point of attendance and interest, the question of establishing a permanent section can then be given further consideration.

Your reference committee feels that the general practitioner constitutes such an important and numerous factor in the membership of this Association that his requests should be given due consideration.

If the House reacts favorably to our suggestion, the officers appointed to conduct the "session" must be selected with a view to presenting a program that will meet the requirements of the situation."

The report of the Reference Committee was approved by the House of Delegates. The officers of this Experimental Section will be appointed by the Council on Scientific Assembly. A number of doctors from Buffalo and Western New York together with representatives from Wayne County presented arguments before the Reference Committee in favor of the adoption of this resolution. Subsequently about twenty of these interested doctors met and expressed as their wish that Dr. Arch Walls of Detroit act as Chairman of this Section and that Dr. Raymond Fillinger of Buffalo act as Secretary.

A resolution on Eligibility of Women Physicians and Surgeons for Medical Reserve Corps of the Army and Navy was introduced into the House by Dr. Emily D. Barringer of New York and referred to Reference Committee on Military Preparedness. (Dr. Emily D. Barringer is the only woman delegate in the House.) This resolution was sympathetically received but disapproved.

A change was made in the Amendments to the By-laws so that Chapter XV, Section 1—Item 7, instead of reading Section on Pharmacology and Therapeutics be amended to read Section on Experimental Medicine and Therapeutics.

Regarding the indictment and trial of A.M.A. et al., the Board of Trustees recommended to the House of Delegates that counsel for the American Medical Association be requested and directed to appeal the judgment based on the verdict of guilty against the American Medical Association in the case of United States v. American Medical Association et al., District Court of the United States for the District of Columbia, number 63221. This recommendation was unanimously adopted by the House of Delegates without one dissenting vote.

A change in the Constitution was proposed which must lie over for consideration at the Annual Session of the House in 1942. The change proposes to increase the number of trustees from nine to eleven.

Dr. Fred W. Rankin of Lexington, Ky. was nominated and elected to the office of President-elect without opposition. Dr. Charles A. Dukes of Oakland, Cal. was nominated to the office of Vice President without opposition. Dr. Olin West was again elected Secretary and Dr. Herman L. Kretschmar was elected to succeed himself as Treasurer. Dr. H. H. Shoulders was re-elected Speaker; Dr. R. W. Fouts of Omaha was re-elected to succeed himself as Vice Speaker. Dr. Ernest E. Irons of Chicago was elected to fill the unexpired term of Trustee of Austin A. Hayden, deceased. Dr. Charles W. Roberts of Atlanta, Ga. was elected trustee to succeed Dr. Thos. S. Cullen of Baltimore who according to the By-laws was not eligible to re-election.

Dr. Frank H. Lahey, President, submitted the following nominations for standing committees, which, on motions duly made, seconded and carried, were confirmed by the House: Dr. Walter F. Donaldson, Pittsburgh, to succeed himself on the Judicial Council for a term ending in 1946. Dr. Frederick A. Coller, Ann Arbor, Michigan, to succeed Dr. S. P. Mengle, Wilkes-Barre, Pa., on the Council on Scientific Assembly, for a term ending in 1946.

Dr. Harvey B. Stone of Baltimore was elected to the Council on Medical Education and Hospitals to succeed Dr. Fred Moore of Iowa, deceased. Dr. Russell L. Haden of Cleveland was elected a member of the Council on Medical Education and Hospitals to fill the unexpired term of Dr. Fred W. Rankin, resigned.

The House of Delegates selected St. Louis, Mo. in which to hold the 1944 Annual Session of AMA.

Respectfully submitted,
HENRY A. LUCE, M.D., *Chairman*
L. G. CHRISTIAN, M. D.
T. K. GRUBER, M.D.
C. R. KEYPORT, M.D.
FRANK E. REEDER, M.D.

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## ANNUAL REPORT OF THE COMMITTEE ON DISTRIBUTION OF MEDICAL CARE, 1940-41

The Committee held one meeting on May 7, 1941.

1. The progress of Michigan Medical Service was discussed.

2. The various maps prepared by S. W. Hartwell, M.D., showing the distribution of physicians in the state, relative buying power in different sections of the state, hospital beds, etc. were discussed. The furthering of this project in detail was held in abeyance as the 1940 census results were not available and even the 1940 census would be outdated due to the rapid population shift in the National Defense Program.

3. The resolution concerning general practitioners in hospitals, which was introduced in the 1940 session of the House of Delegates and referred to the Committee for study (Resolution printed in full on page 881 of November 1940 M.S.M.S. Journal) was referred to the Executive Committee of The Council with the recommendation of this Committee that it be adopted.

4. After discussion of the feeling in the ranks of medicine connected with the medical examination of draftees, a resolution was unanimously adopted, requesting that the matter be presented to the A.M.A. House of Delegates.

5. Other problems presented by the members included practicing of the physician in hospitals, care of victims in accidents who have no insurance and in many cases fail to pay for medical and hospital expenses incurred. It was pointed out that the same people pay any and all fines, provide cash for bail and spend considerable sums to repair wrecked cars and ignore the doctor's bill. The Committee is giving further thought to this problem for later discussion and recommendations.

Respectfully submitted,
T. S. Conover, M.D., *Chairman*
A. F. Bliesmer, M.D.
H. O. Brush, M.D.
A. C. Henthorn, M.D.
R. F. Salot, M.D.
G. B. Saltonstall, M.D.
H. B. Zemmer, M.D.

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## ANNUAL REPORT OF MEDICAL-LEGAL COMMITTEE, M.S.M.S., 1940-41

Beginning January 1, 1940, upon instructions of the House of Delegates, the State Society ceased defending members in alleged malpractice actions which arose on and after that date. However, the Medical-Legal Committee continued to advise members pertaining to the rights and duties of physicians in the practice of their profession.

Of the twelve cases referred to your Committee prior to January 1, 1940, all have been adjudicated to date except two.

Since January 1, 1941, only one new case (the cause of action of which arose in 1939) has been reported to your Committee.

No further action has been taken in the two cases reported in 1940 (the cause of action of which arose in 1939). In one of these matters, it is possible that responsibility may be assumed by private insurance company.

In accordance with Chapter Six, Section Four of the M.S.M.S. By-laws, your Medical-Legal Committee stands ready at all times to give advice and assistance to any members of the Michigan State Medical Society who are faced with medico-legal problems. The Society will continue its custom of sending malpractice notification cards to members with their membership certificates, as a convenience for advising insurance carriers and the M.S.M.S. Medical-Legal Committee of any threatening actions.

Respectfully submitted,
S. W. Donaldson, M.D., *Chairman*
T. E. Hoffman, M.D.
Wm. J. Stapleton, Jr., M.D.
Bert Van Ark, M.D.
E. A. Wittwer, M.D.

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## ANNUAL REPORT OF M.S.M.S. REPRESENTATIVES TO THE JOINT COMMITTEE ON HEALTH EDUCATION, 1940-41

The representatives of the Society to the Joint Committee have had no occasion to meet during the year.

The Chairman, who is also chairman and treasurer of the Joint Committee, called the annual meeting of the component units for June 13, 1941. The traditional activities have been carried on during the past year. About the same number of health lectures were assigned. The radio program, which is a most effective avenue for the dissemination of health education, has been ably handled by R. J. Mason, M.D., chairman of the M.S.M.S. Radio Committee. Arrangements with the various outlets and the multigraphing and distribution of copy is handled by the Joint Committee. An interesting exhibit by means of a large chart showing our activities, was presented at the American Public Health Association meeting in Detroit.

We regret to report that it seems probable that a lack of adequate financial support will compel the Joint Committee to discontinue some of its activities. An activity which has received most favorable comment is the health column in the *Detroit News,* which has been running for nine years. With this health column is an associated question and answer service which has grown to large proportions. We believe this to be a valuable activity, but it is an expensive one. The total cost runs about twenty-five hundred dollars of which the *Detroit News* pays a thousand dollars. Unless sufficient funds are obtained, this activity will be discontinued. It is planned to go on with the speaking bureau and the radio programs.

There is no lessening of the need for the dissemination of factual health information to the laity, but today there are many organizations and governmental divisions actively engaged in this work. Twenty years ago when the Joint Committee was formed there were few avenues of approach and few groups interested in this objective. There is no thought of the Joint Committee discontinuing its activities. It was, however, suggested at the annual meeting, that in the future the Committee should lay special emphasis on its function as an advisory committee on health education. With its twenty-five component units it has a special opportunity to serve as a coördinating agency, while at the same time it carries on as many of its traditional activities as its budget permits.

Your attention is called to the quite extensive library of sound and silent films which were purchased by the Joint Committee. These are available under certain restrictions, by application to the Extension Division of the University of Michigan.

Respectfully submitted,
Burton R. Corbus, M.D., *Chairman*
C. T. Ekelund, M.D.
Henry A. Luce, M.D.
W. R. Vaughan, M.D.

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## ANNUAL REPORT OF PREVENTIVE MEDICINE COMMITTEE, 1940-41

During the year just passed this committee, through its advisory committees, has witnessed a marked increase in the demands for adequate and immediate solutions of many new problems that have been posed before it. Most of this has been created by the all-pervading national defense program with which preventive medicine is so intimately interlocked; but in spite of the poor definition of many of these problems the various advisory committees have in most instances successfully met the demands made upon them.

The expansion of industrial activity, the vast increase in the employed with shift in population, the concentration of large groups in army camps, have all served to bring into sharp focus the necessity of preventive effort in industrial medicine, degenerative diseases, tuberculosis, syphilis and venereal disease, maternal and child health and mental hygiene. The health education of the public through use of the radio, press and public meetings, and the expansion of facilities for postgraduate education of physicians have also taken on new importance in the face of the changed situation.

In addition, an effort was initiated to eliminate what appeared to be wasteful reduplication in the administration of certain of the statutes dealing with the lame and the halt; and, while this fell just short of its mark, it served to bring to public notice certain glaring defects that are bound to be eliminated.

Groundwork for the eventual establishment of a State Bureau of Cancer Control was well laid by the

Cancer Committee and this group further expanded its activities into the field of cancer control.

In all deliberations, the committees have had the helpful coöperation of representatives of the State Health Department, Children's Fund of Michigan, W. K. Kellogg Foundation and the Michigan Tuberculosis Association, so that all action taken represents the combined opinion of all interested groups. The individual committee reports present in detail the full action of each of these groups.

The year was marred by the untimely death of C. K. Valade, M.D., Chairman of the Committee on Syphilis Control, whose loss is keenly felt by all members of the profession.

Your committee held two meetings during the year: on January 9, and June 19, 1941. In addition, it assisted in the selection of several speakers for the General Assembly at the State Meeting.

Respectfully submitted,
Wm. S. Reveno, M.D., *Chairman*
J. D. Bruce, M.D.
Henry Cook, M.D.
Burton R. Corbus, M.D.
Wm. A. Hyland, M.D.
M. R. Kinde, M.D.
Henry A. Luce, M.D.
R. J. Mason, M.D.
H. Allen Moyer, M.D.
H. H. Riecker, M.D.
W. F. Seeley, M.D.
Frank Van Schoick, M.D.
A. R. Woodburne, M.D.

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## ANNUAL REPORT OF THE RADIO COMMITTEE, 1940-41

During the past year, twelve radio stations throughout the state participated with the Society in providing facilities for broadcasts. These are:

| *Name of Station* | *Name of Doctor in Charge* |
|---|---|
| Battle Creek—Station WELL<br>Aldon H. Haight, Mgr. | Dr. E. Van Camp<br>229 Ward Bldg. |
| Bay City—WBCM<br>H. A. Giesel, Mgr. | Dr. J. Norris Asline<br>Essexville, Michigan |
| Detroit-Windsor—CKLW<br>Campbell Ritchie | Dr. G. C. Penberthy<br>David Whitney Building |
| Flint—WFDF<br>A. R. Cooper, Mgr. | Dr. H. M. Golden<br>Center Building |
| Grand Rapids—WOOD<br>Stanley Barnett | Dr. P. W. Kniskern<br>421 Medical Arts Bldg. |
| Houghton—WHDF<br>Albert Payne, Mgr. | Dr. K. J. McClure<br>Calumet, Michigan |
| Jackson—WIBM<br>Roy Radner, Mgr. | Dr. E. A. Thayer<br>National Bank Bldg. |
| Kalamazoo—WKZO<br>Patty Criswell, Pub. Rel. | Dr. Hazel R. Prentice<br>458 W. South Street |
| East Lansing—WKAR<br>R. J. Coleman, Mgr. | Dr. L. M. Snyder<br>City Nat'l Bank Bldg. |
| Muskegon—WKBZ<br>Frank Lynn, Mgr. | Dr. E. N. D'Alcorn<br>Michigan Theatre Bldg. |
| Marquette—WDMJ<br>G. H. Brozek, Mgr. | Dr. N. J. McCann<br>Ishpeming |
| Port Huron—WHLS<br>Harmon Stevens, Mgr. | Dr. E. W. Meridith<br>1102 Sixth Street |

During this period, the following talks were broadcast. These talks have all been in dialogue form wherein the station announcer asked a question. This was answered by the physician delivering the talk. The signature at the beginning and closing of each talk announced the name of the speaker as a member of the M.S.M.S.

Following is a list of the broadcasts given: the common cold, influenza, pneumonia, wintertime accidents, diabetes, sinus disease, the value of x-ray examinations in accidents and emergency cases, colitis, artificial fever therapy, relationship of dentistry and medicine, scarlet fever, eyesight in mental and physical development, simple facts about how we hear, premarital examinations, importance of pre-natal care, the menopause, the value of anesthesia in surgery and medicine, can cancer be cured?, refrigeration treatment of cancer, the common causes of fatigue, problems in obesity, anemia, acute abdominal pain, truth and fiction about blood pressure, misconceptions about heart disease.

Respectfully submitted,
R. J. Mason, M.D., *Chairman*
C. L. Grant, M.D.
A. B. Gwinn, M.D.
R. G. Janes, M.D.
G. C. Penberthy, M.D.

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## ANNUAL REPORT OF COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION, M.S.M.S., 1940-41

The Committee on Postgraduate Medical Education met twice during the year: On January 29, and on May 21, 1941.

At the first meeting the Michigan Postgraduate program in medicine was presented by the Chairman and discussed by the Committee. The Chairman reminded the Committee of two actions taken in previous meetings: (1) a motion to allow the Chairman of the Committee to make changes in the planned program when emergencies make these changes advisable; (2) a motion to require the notification of the central office of the dates of all medical meetings in the state other than those of county and special societies, so that conflicts with postgraduate meetings would not occur.

The recommendations of the County Societies' Committee of the Council were thoroughly discussed. These recommendations related to postgraduate medical education and were as follows: (1) It was recommended that a questionnaire be sent to all members relative to the subject matter of future postgraduate courses. This has been done in the past and the Committee recommended that it be continued; (2) It was suggested that an all-day conference given by outstanding lecturers replace the four weekly meetings. The discussion of this suggestion brought out several objections: the increased cost of obtaining speakers; inadequate time for questions; hesitancy in asking questions of strange speakers; lack of sustained interest; and the desire of most general practitioners to have part of the day for office work and house calls; (3) The recommendation that examinations covering the subjects presented over a four-year period be given before granting certificates of Associate Fellowship or Fellowship in Postgraduate Medicine, was set aside for future discussion.

The Committee suggested a Clinical Pathological Conference to be given at the last meeting of the series.

It was the collective opinion of the Committee that the present plan of postgraduate medical education is producing excellent results and that no radical changes should be made at this time.

Methods of stimulating attendance at the various centers of teaching were discussed. The Committee reiterated its belief that the Councilor in each district should be responsible for stimulating interest in the postgraduate program, and that the secretary of each county society notify the membership of the Society of all postgraduate programs.

A communication from Councilors Perkins and Barstow requested that all of the spring meetings be held in Bay City, and that all the fall meetings be held

in Saginaw. This request was unanimously granted by the Committee.

The subjects presented in the extramural course for October, 1940, and April, 1941, were as follows:

October, 1940.

The Newborn Period.
The Management of Labor.
The Management of Unusual Cases of Hernia.
The Significance of Albuminuria.
The Psychoneuroses.
Laboratory Procedures for Office Practice.
Nasal Accessory Sinus Disease in the Practice of Medicine.
The Differential Diagnosis of Coma.

April, 1941.

The Care of the Injured.
The Diagnosis and Treatment of Meningitis.
Useful Drugs in Gastroenterology.
Digestive Derangements in Infancy and Childhood.
The Significance of Albuminuria.
Office Gynecology.
Clinical Conference. Diagnostic Problems in Non-tuberculous Pulmonary Disease.

The registration in the postgraduate courses from July 1, 1940, to June 30, 1941, is as follows:

*Extramural Registrations*—Ann Arbor, 124; Flint, 149; Battle Creek-Kalamazoo, 130; Mt. Clemens, 78; Grand Rapids, 177; Jackson-Lansing, 120; Saginaw-Bay City, 163; Traverse City, etc., 97. Total, 1038.

*Intramural Registrations*—Allergy, 12; anatomy, 28; diseases of blood, 14; diseases of heart, 13; electrocardiographic diagnosis, 33; gastroenterology, 19; gynecology and obstetrics, 14; internal medicine (American College of Physicians), 24; ophthalmology and otolaryngology, 58; pathology, 4; personal courses, 122; pediatrics, 133; proctology, 21; roentgenology, 19; summer school, 27. Total, 541.

In addition to the above Ingham County has submitted a list for postgraduate credits of 131; other physicians qualifying for credits are estimated at 100, making a total of 231.

The entire number of registrants was 1810.

At the second meeting of the Committee, on Wednesday, May 21, the first matter under discussion by the Committee was the type of program for teaching in the extra-mural work. It was the unanimous opinion of the Committee that the present plan of holding meetings once each week for four weeks during the fall and spring be continued. The objections raised to the one-day continuous session were as follows: 1. Inability of the physicians to digest mentally eight lectures in one day. 2. The tendency for the members to tire and leave the lectures so that the last papers are heard by only a few. 3. The one-day postgraduate meetings held in Lansing, Flint, Jackson, Kalamazoo, Highland Park, and other places in the state fill the need for this type of program, and extension of these programs would militate against attendance of the annual State Meeting without meeting the acknowledged need for the continuity provided in the present eight-day yearly program.

The idea of correlating and recognizing all postgraduate activities throughout the state was discussed. The Chairman suggested that a request for correlation, recognition and direction by the central office come from those societies which carry on postgraduate activities. Dr. R. H. Pino and Dr. Douglas Donald were appointed to consult with Wayne County Medical Society relative to this matter.

It was decided by the Committee that postgraduate work in the northern part of the Southern Peninsula be concentrated in Traverse City. Also, that Jackson and Lansing, Battle Creek and Kalamazoo, alternate in giving the fall and spring courses.

The Chairman called attention to the increased attendance in those districts where the Councilors made a personal effort to notify the doctors of the meetings, and he suggested that at the Mackinac Island meeting of The Council this matter be presented by Councilor Cummings and Secretary Foster.

Dr. Burton R. Corbus introduced the subject of graduate training for interns and residents. The matter of improved medical education and training for interns and residents was discussed at length by all members of the Committee and the following motion passed: The Committee commends and supports the efforts of the Michigan State Medical Society to collaborate with the University of Michigan Medical School and the Medical School of Wayne University in an effort to improve intern and resident training in Michigan hospitals and in the encouragement of graduate medical education. Moved by Dr. Donald and seconded by Dr. Fillinger.

The suggested subjects for the 1941-42 program were next considered. The following subjects were approved by the Committee:

The Modern Treatment of Fractures.
The Recognition and Prevention of Accidents of Pregnancy.
The Interpretation of Fatigue as a Symptom.
The Office Management of the Allergic Patient.
The Office Management of the Diabetic.
Recognition and Treatment of Rheumatoid Arthritis.
Convulsions in Infancy and Childhood; their Diagnosis and Management.
Emergency Drugs in General Practice.
The Early Diagnosis of Cancer.
Abnormalities of Growth and Development in Children.

Notwithstanding the slight decrease in attendance in 1940-41, on the whole it has been in the opinion of your Committee quite a satisfactory year. The imminence of the war effort, which has called many young men into service and had a more or less disrupting influence on those within the age of eligibility for military service, has prevented many from leaving their homes for postgraduate study. It is surprising that so many have continued in their devotion to an improvement of their service. While the coming year will probably see a further slight decrease in attendance, we should continue to provide the usual opportunities for those who have been availing themselves of these services throughout the years, and also make an increased effort to stimulate interest for professional improvement in those who have been gradually relinquishing their practices, or have actually done so, thus assuring to the people the most adequate service possible under the circumstances.

Respectfully submitted,

James D. Bruce, M.D., *Chairman*
Abel J. Baker, M.D.
Andrew P. Biddle, M.D.
Howard H. Cummings, M.D.
Douglas Donald, M.D.
Wells B. Fillinger, M.D.
Charles L. Hess, M.D.
Henry A. Luce, M.D.
Wm. H. Marshall, M.D.
Edgar H. Norris, M.D.
Ralph H. Pino, M.D.
Wm. E. Tew, M.D.
John J. Walch, M.D.

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*Northwestern University Alumni Club* luncheon will be held at the Peninsula Club, Grand Rapids, Thursday, September 18, 1941, 12:15 p.m. on the occasion of the M.S.M.S. Convention. E. W. Schnoor, M.D., president of the Nortwestern Alumni Club of Grand Rapids, will be chairman. All Northwestern Alumni are cordially invited.

## ANNUAL REPORT OF CANCER COMMITTEE, 1940-41

The Cancer Committee held four meetings during the year 1940-41: on January 6, 1941, February 17, 1941, March 6, 1941, and June 9, 1941. The objectives of the Committee for the year were:

1. The drafting of a bill to authorize laboratory work for the indigent cancer patient at the expense of the state. This program was to be under the direction of a committee composed of doctors of medicine licensed by the State of Michigan and appointed by the Governor, the work integrated with the Michigan Department of Health.

2. The maintaining in office of our Field Representative, who was in the Medical Reserve Corps of the United States Army, as long as possible during the present year.

3. The development of a medical brochure on "The Patient with Incurable or Advanced Cancer" under the direction of the M.S.M.S. Cancer Committee, the Michigan Department of Health, and the Field Representative.

### Summary

1. The bill (HB 580) drafted by the Cancer Committee with the advice of members of the Michigan Pathologists Society, the Legislative Committee and the Executive Committee of the M.S.M.S. Council was endorsed by the Legislative and Executive Committees and presented to the Governor who in turn arranged for its introduction in the House of Representatives by a member of both parties. This bill was assigned to the Public Health Committee. During discussion on the bill in this committee, the representative of the osteopaths (a member of the House Public Health Committee) insisted that the designation of members of the Cancer Board, who in the bill were to be doctors of medicine and appointed for staggered terms by the Governor, be changed to the term "physicians." During the present administration this would not make any difference, but at some future time, it would make possible the appointment of all osteopaths to the Cancer Board; Representative S. L. Loupee, the House member who sponsored the bill, is also a member of the Public Health Committee and objected very strenuously to this amendment. He felt that he could not be a party to this bill if such a damaging amendment were accepted. In discussing this matter with the members of the Executive Committee as well as the Chairman of the Cancer Committee, he decided not to accept the amendment: therefore the bill died in the Public Health Committee of the House.

2. Doctor Frank Power, our Field Representative, was called to service in April, leaving the last two and one-half months of the year unfilled by a Field Representative for the combined work of the M.S.M.S. Cancer Committee and Michigan Department of Health. Health Commissioner H. Allen Moyer, M.D., has been extremely satisfied with Doctor Power's work and requests that the position be offered him upon the fulfillment of his training period. However, this will not be before April, 1942 and in the meantime, the Committee has leads on two men who are well trained who are being contacted at this time.

3. The Brochure, "The Patient with Incurable or Advanced Cancer," is an effort to recommend a form of treatment for the inoperable and recurrent cancer patient to eliminate in as far as possible the conversion of this patient into an addict of some sort. This brochure will contain important chapters discussing the mental approach in announcing to the patient and the patient's family the incurability of the disease and the psychological methods to be employed with the patient and family including environmental arrangements. Other chapters will be devoted to methods to relieve pain, unsightliness, and the employment of various drugs as far as possible that are not habit forming and when the latter are necessary, the judicious use of them. This brochure will be completed at an early date for printing at state expense and distribution throughout the state by members of the M.S.M.S.

Respectfully submitted,
Wm. A. Hyland, M.D., *Chairman*
F. A. Coller, M.D.
W. G. Gamble, M.D.
C. R. Hills, M.D.
A. B. McGraw, M.D.
Lawrence Reynolds, M.D.
William R. Torgerson, M.D.

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## ANNUAL REPORT OF THE CHILD WELFARE COMMITTEE, M.S.M.S., 1940-41

The Child Welfare Committee has continued the several projects started under the leadership of F. B. Miner, M.D.

1. Coöperation with the State Health Department in formulating and distributing information relative to immunization schedules. The schedules were brought up to date and are being sent out two or three times a year. The revised material is sent to the members of the M.S.M.S. by the Secretary and to the parents of newborn babies by the State Health Department.

2. R. M. Kempton, M.D., M.S.M.S. Representative to the School Health Committee of the State Department of Public Instruction, completed his work on "Accidents in School." This was reviewed, changed in minor details and approved by the whole Child Welfare Committee.

3. Lillian R. Smith, M.D. and Warren E. Wheeler, M.D. of the Maternal Health and Child Health Division of the State Health Department, are continuing their splendid coöperation in the distribution of incubators throughout the state. Dr. Wheeler conducts a refresher course on care and management of prematures in each district where the State incubators are loaned. This work has been productive of a tremendous amount of good. Those who have been fortunate enough to take part in these courses have been very enthusiastic about them.

4. With the advice and counsel of the Committee, Dr. Wheeler prepared a very fine brochure on Measles. This was printed by the State Health Department and distributed in volume to local health departments who in turn distributed them to the practicing physicians in their district.

A similar brochure is being developed by Dr. Wheeler and Dr. Pearl Kendrick on Whooping Cough. This, we hope, will be ready for distribution in the Fall.

5. F. B. Miner, M.D. and Frank Van Schoick, M.D. have been appointed to the Child Welfare Committee of the Michigan Welfare League. In this position they have been valuable liaison men with other groups interested in Child Welfare.

6. The major activity of the Committee this year has been relative to the Crippled-Afflicted Child problem. Inasmuch as this was a legislative year, the Committee felt that certain changes in existing legislation were imperative. Pursuant to this thought the committee formulated certain fundamentals and forwarded them to the Executive Committee of the Council and to the Preventive Medicine Committee of the M.S.M.S.

The Child Welfare Committee recommended that The Council transmit to the Governor of the State of Michigan the following expression of its attitude relative to the Crippled Children Commission and its problems:

1. The personnel of the Crippled Children Commission should be selected solely on the basis of knowledge of and interest in children and their problems. Such persons should not represent

any special group in the community but should be representative of the people of Michigan as a whole.

2. The function of the Crippled Children Commission should be to establish policies, and the carrying out of these policies should be entrusted to a medical administrator with full authority to act.

3. The medical administrator should have an assistant to carry out such business matters as may be delegated to him.

4. The state should be divided into districts and medical coördinators be appointed to represent the administrator in such districts in carrying out the policies of the Crippled Children Commission.

5. The present system of requiring the parents of medically indigent children to sign notes for the re-payment to the State for services rendered under this program should be discontinued.

The Child Welfare Committee recommends that The Council transmit to the Governor of the State and to the Legislature the following expression of its attitude relative to legislation providing for the care of the sick child:

1. There is no basis for separate legislation for the Crippled and for the otherwise afflicted child. Crippled children should be considered as a specialized group of afflicted children. Expert medical care of crippled children is frequently as important as expert surgical care, and medical complications often arise during the course of orthopedic treatment. The crippled child is essentially a sick child.

2. Suitable enabling legislation should be passed creating a commission with authority to care for all sick children. This authority should include the power and obligation to accept and/or reject cases arising under this act, to supervise their care, to establish appropriate fee schedules for services rendered by physicians and hospitals, and to arrange the payment therefor.

3. The personnel of the Commission should be selected solely on the basis of knowledge of and interest in children and their problems. Such persons should not represent any special group in the community but should be representative of the people of Michigan as a whole.

4. The function of the Commission should be to establish policies and methods, the carrying out of which should be delegated to a medical administrator with full authority and responsible only to the Commission.

5. The medical administrator should have whatever medical or business assistants may be necessary to the proper execution of his functions.

The Chairman, representing the M.S.M.S. Child Welfare Committee was appointed on a special committee by The Council to study the Crippled and Afflicted Children problem and to coöperate with the Legislative Committee of the M.S.M.S. in formulating proper legislation pertaining thereto. A great many conferences were held in Lansing and Detroit and finally a bill was drafted which had the hearty support of the seven interested groups.

The last activity that the Committee embarked upon is that of Child Health in War. This is so new to all of us that the Committee has nothing to report other than the fact of continued investigation.

Respectfully submitted,
FRANK VANSCHOICK, M.D., *Chairman*
W. C. C. COLE, M.D.
LEON DEVEL, M.D.
CAMPBELL HARVEY, M.D.
R. M. KEMPTON, M.D.
EDGAR MARTMER, M.D.

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## ANNUAL REPORT OF IODIZED SALT COMMITTEE, M.S.M.S., 1940-41

The meetings of this Committee are dependent upon the necessity of urgent business or new developments.

1. The Committee held one meeting during the year and that was on November 13, 1940.

At that time a report was given by the Chairman of the lengthy testimony which he introduced, in collaboration with Mr. Wilcox, Chairman of the Standardization Committee of the Salt Producers Association and their attorney, Mr. Westcott, at a hearing of the Federal Food and Drug Administration in Washington on October 30, 1940. A copy of this testimony together with collaborative testimony given by Dr. Walter T. Harrison, Senior Surgeon of the United States Public Health Service, and also testimony given for the Government by Dr. George Dobbs of the Drug Division of the Food and Drug Administration, are hereby submitted.

Since that hearing no further action or regulation has come out of the Food and Drug Administration except a verbal order that no therapeutic statement can be printed on the label of any package of iodized salt nor can any statement or advice accompany the package.

2. Since the last meeting of the Michigan State Medical Society, the Trustees of the American Public Health Association accepted the Michigan Committee's invitation for the formation of a Study Committee on Endemic Goiter and such has been organized, as a Sub-committee under the Sub-committee on Evaluation of Administrative Practices with Dr. Haven Emerson as Chairman.

This sub-committee at the present time is made up of the following members:

George N. Curtis, M.D., Professor of Surgery, Dept. of Research Surgery, Ohio State University, Columbus, Ohio; E. B. Hart, Ph.D., College of Agriculture, University of Wisconsin, Madison, Wis.; Roy D. McClure, M.D., Department of Surgery, Henry Ford Hospital, Detroit; Hugh McCullough, M.D., 325 N. Euclid Avenue, St. Louis, Mo.; W. H. Sebrell, Jr., M.D., Chief, Division of Chemotherapy, U. S. Public Health Service, National Institute of Health, Washington, D. C.; Harry A. Towsley, M.D., Department of Pediatrics, University Hospital, Ann Arbor; W. G. Wilcox, Ph.D., Chairman of the Standardization Committee, Salt Producers Association, 154 Bagley Ave., Detroit; C. C. Young, Dr.P.H., Director of Laboratories, Michigan State Department of Health, Lansing; Frederick B. Miner, M.D., chairman, M.S.M.S. Iodized Salt Committee, 400 Sherman Building, Flint, Secretary of Committee.

*Counsultants*—Thomas B. Cooley, M.D., Pediatrician, 1728 Seminole Ave., Detroit; David J. Levy, M.D., Pediatrician, 768 Fisher Bldg., Detroit; David Marine, M.D., Research Pathologist, Montefiore Hospital 150 E. Gun Hill Road, New York; J. F. McClendon, M.D., Research Professor of Physiology, Hahnemann Medical College and Hospital, 235 N. 15th St., Philadelphia.

This national Committee met for the first time at a two-day Conference in Detroit on June 14 and 15. The following Agenda was considered. The long report has not been edited, as yet. It is proposed to bring this to the Michigan Committee as soon as it is completed.

Agenda of first meeting—June 14 and 15, 1941.

1. Brief historical sketches of the work of the Michigan Committee.

(a) Organization and Plan—Presented by Dr. Cooley.
(b) Results—Prophylactic—Presented by Dr. Levy.
(c) Surgical—Presented by Dr. McClure.

2. Acceptance, if possible, of etiology of endemic goiter. Is there any reason to change from the iodine deficiency theory? Or is there any doubt? Presented by Drs. Marine and McCullough.

3. Agreement of a plan to ascertain the iodine deficiency by counties or states. Presented by Drs. Sebrell and McClendon.

4. Agreement of a standard analysis of water and other test. Presented by Dr. Young.

5. How much supplementary iodine is necessary to protect persons and domestic livestock living in these areas and how stabilized? (The same iodine content in salt for both is in use today). Presented by Drs. Curtis and Hart.

6. Description of what the State Public Health Departments are doing in a preventive way to meet the problem. Presented by Dr. Sebrell.

7. A proposed uniform plan of prophylaxis. Presented by Drs. Towsley and Emerson.

8. A procedure to ascertain the results of preventive measures. Presented by Dr. Young.

9. The present status of iodized salt with the Federal Food and Drug Administration and the Salt Producers. Presented by Dr. Wilcox and Dr. Miner.

10. Labeling, iodine content, stabilizer used, and the legend statement, "Iodized Salt prevents simple goiter," as recommended by the Michigan Committee. Presented by Dr. McClure.

11. Agreement on an official statement for the Salt Producers and the Federal Food and Drug Administration. Presented by Dr. Levy.

12. Agreement on objectives, allocation and division of the work. Presented by Dr. Emerson.

All out-state members spoke appreciatively of the pioneer work accomplished by the Michigan State Medical Society's Iodized Salt Committee. Many of its principles were adopted to apply to the national program.

The most important point, however, adopted by the national Committee is the recommendation of the use of a stabilizer in iodized salt and the reduction of the iodine content from two-hundredths of one per cent to one-hundredth of one per cent.

The necessity of eliminating the therapeutic statement from the package of Iodized Salt creates the necessity for everlasting educational programs for the use of Iodized Salt by Public Health Departments and by all members of the profession in all goiterous areas.

Respectfully submitted,
FREDERICK B. MINER, M.D., *Chairman*
L. W. GERSTNER, M.D.
D. J. LEVY, M.D.
R. D. MCCLURE, M.D.
H. A. TOWSLEY, M.D.
S. YNTEMA, M.D.

———MSMS———

## ANNUAL REPORT OF THE COMMITTEE ON HEART AND DEGENERATIVE DISEASES, 1940-41

During the third year of its existence, the Committee on Heart and Degenerative Diseases continued its policy of directing its educational effort toward the physician in general practice. Its first concern was to define the broad principles governing the control of heart disease in children including the reporting of rheumatic heart disease to the State Health Department in an effort to determine the incidence of the disease in Michigan. This culminated in an article appearing in the M.S.M.S. JOURNAL which covered the principles of the prevention and early care of the rheumatic child.

The classification of heart disease is of first importance in an understanding of the subject. The Committee has distributed to the members of the Society a short pamphlet dealing with the classification of heart disease and the correct method of reporting deaths from heart disease so that the vital statistics of the State will reflect more accurately the incidence and kinds of heart disease with which the profession should be concerned.

The Committee also distributed two pamphlets to the profession—one dealing with the methods of taking blood pressure readings and the other with the physical examination of the circulatory system. These pamphlets had been prepared by a committee of the American Heart Association and were mailed to each member through the courtesy of the Michigan Tuberculosis Association. Since heart disease is now the first cause of death, these two examinations seem of importance to the Committee. An explanation of the cardiac status and the blood pressure enters into the management of every patient, in every specialty, before and after every operation. The medical aspects were particularly apparent in the preparedness program.

The Committee was influential in obtaining an opportunity for the profession to attend courses in heart disease under the direction of the Wayne County Continuation Study Committee and the M.S.M.S. Advisory Committee on Postgraduate Education. While these courses were well attended, the Committee is anxious to secure a still greater attendance by the profession on short postgraduate courses dealing with the degenerative diseases. Individualized and personal instruction concerning examination of the heart and the treatment of patients is fundamental to an understanding of the subject and this can be best obtained by supervised bedside teaching.

Having begun in a small way the educational efforts in heart disease, the Committee believes that its field lies in continuing and intensifying this program. The widespread prevalence of the degenerative diseases would suggest continuing effort in the educational field. Some consideration is being given to the problem of diabetes prevention in this state. It is estimated that there are fifty thousand cases of glycosuria in Michigan, including about one hundred who are doctors. The success in this field achieved by Doctor Elliott Joslin in the Southwest should encourage us in our local effort. A beginning already has been made by means of postgraduate programs throughout the State toward practical instruction in the management of this great group of people.

Your Committee expresses its gratitude for the fine coöperation of The Council, the Editor of the JOURNAL and all members who have contributed to the support of its program.

Respectfully submitted,
HERMAN H. RIECKER, M.D., *Chairman*
B. B. BUSHONG, M.D.
M. S. CHAMBERS, M.D.
JOHN LITTIG, M.D.
E. D. SPALDING, M.D.

———MSMS———

## ANNUAL REPORT OF THE MATERNAL HEALTH COMMITTEE, 1940-41

Several matters of importance have been considered by the Maternal Health Committee during the year 1940-41. The collection of data concerning hospital care of maternity patients in Michigan hospitals and maternity homes has been considered and submitted to the Committee. The data have been carefully analyzed and the complete report will be presented by a committee member, Alexander M. Campbell, M.D., before the Section on Obstetrics and Gynecology at the annual meeting in Grand Rapids next September. There is much of interest in the data collected and many lines and many avenues of approach for maternity care in Michigan are open. This report should be of interest to all those concerned in the care of pregnant women.

The case of People vs. Hildy (Mich. N. W. 829) has brought to light the interesting and incredible fact that while it is necessary for a physician to have a license to practice obstetrics in the State it is not necessary for a mid-wife to be so licensed. This condition of affairs has been reported to the parent Committee on Preventive Medicine.

The lack of clinical teaching material in obstetrics at the University of Michigan has been carefully considered and a representative has appeared before the Executive Committee of the Council to discuss ways and means by which more material for teaching students can be made available.

The Committee has been interested in collaborating with the Michigan Department of Health in the construction of a small inexpensive incubator for premature babies in the rural districts. The result has been that two incubators have been devised which will apparently answer the purpose.

The Committee has approved the subject of the State Department of Health in sending Russell R. deAlverez-Skinner, M.D., into the State for clinics in postgraduate obstetrics, with the approval of local medical societies.

At least one more meeting of the Committee will be held before the annual meeting of the Society in September at which time the authority in licensures of maternity homes in the State will be considered.

Respectfully submitted,
W. F. Seeley, M.D., *Chairman*
D. C. Bloemendaal, M.D.
H. A. Furlong, M.D.
N. F. Miller, M.D.
H. W. Wiley, M.D.
A. M. Campbell, M.D., *Advisor*

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## ANNUAL REPORT OF COMMITTEE ON SYPHILIS CONTROL, 1940-41

This year our Committee has had five meetings: September 26, 1940; November 3, 1940; January 19, 1941; March 5, 1941; and June 15, 1941.

It was with extreme regret that this Committee, which had worked so coöperatively together, learned of the death of our respected Chairman, Cyril K. Valade, M.D., of a heart attack, on March 27, 1941. We had all worked together so well under his excellent guidance that we felt that our committee work had been completely disrupted. President P. R. Urmston, M.D., asked Arthur R. Woodburne, M.D., to complete Dr. Valade's unexpired term and we have heartily backed his efforts to continue the work.

One of our chief interests the past year has been Venereal Disease Control in areas around the various enlarged military cantonments. In this, we had the collaboration of the State Health Department's Venereal Disease Division through T. E. Gibson, M.D., the local County Health Departments, and the private physicians practicing near the camps. We have discussed at length and offered our services in venereal disease control among the soldiers. Dr. Gibson's report at our last meeting indicates that the control measures advised have produced extremely gratifying results with the incidence of venereal diseases among the troops in the Fort Custer area being kept at a very low level.

This year our Committee has worked constantly to have standard regulations for reporting of venereal diseases made mandatory at all laboratories—both the private laboratories and those supported by public funds. Some progress has been made in this direction.

B. W. Carey, M.D., Medical Director for this district of the N.Y.A., was with us on several occasions and we devoted a good share of one meeting to outlining a policy concerning projects to be approved and methods to be employed in surveys and advice to the youth of the N.Y.A. and their parents, in matters of venereal disease control.

Dr. Carey has agreed to undertake the survey of our venereal disease situation as it affects the "Idlewild" area in Lake County, Michigan. This is to be done when he feels that results will be most conclusive and when he can best fit it in with his program.

During the early part of the legislative session, some effort was made to modify the premarital law. This Committee watched this legislation and with the aid of the M.S.M.S. Legislative Committee was influencial in keeping the bill from being reported out of committee.

Our Committee has worked with the Michigan Pharmaceutical Association through their representative, Mr. Otis Cook, to completely review House Bill No. 129, a bill to regulate and properly control the sale of prophylactic appliances for the prevention of venereal diseases. The Committee recommended that the Michigan State Medical Society support this bill.

Dr. Gibson, of the Michigan Department of Health, holds a captain's commission in the Medical Reserve Corps, and our Committee felt that because of his importance in the State with so many defense and cantonment areas, that his retention in his present capacity with the State was imperative. A resolution to this effect was drawn up and we have Dr. Gibson still with us and it is the hope of our Committee that he will be left with us and not called into Federal Service.

Drs. Roehm and Rice in their subcommittee work have made every effort to stimulate interest in venereal disease control through the County Medical Societies.

Dr. Woodburne has prepared outlines of talks to be used by speakers using our new sets of slides for both professional and lay education in venereal disease control. Slides for both groups in sets of about seventy each are now available to any member of the Michigan State Medical Society. With these slides are furnished the outlines for talks for all types of programs, and various grouping of slides may be used to suit any size or type of audience. These slides and outlines may be obtained by writing to any member of this Committee or the executive offices of the Michigan State Medical Society, 2020 Olds Tower. Lansing.

This Committee has had a very pleasant year serving the Michigan State Medical Society in our present capacity and hope that our efforts will be continued by our successors.

Respectfully submitted,
Arthur R. Woodburne, M.D., *Chairman*
Robert S. Breakey, M.D.
Eugene A. Hand, M.D.
J. W. Rice, M.D.
Harold R. Roehm, M.D.
Loren W. Shaffer, M.D.

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## ANNUAL REPORT OF INDUSTRIAL HEALTH COMMITTEE, M.S.M.S., 1940-41

Immediately after the 1940 Annual Meeting, the Industrial Health Committee held its first meeting in Detroit. In the discussion at that time, the Committee came to the conclusion that sufficient programs of education of the profession had been developed, but that same should continue throughout the year. These programs have continued by the use of speakers on the postgraduate course of the Michigan State Medical Society. A seminar was held by the University of Michigan Department of Public Health in which members of the Committee participated. Other meetings were held in the State which were entirely devoted to the subject of industrial health. Numerous regular county medical society meetings were also devoted to the subject of industrial health.

It has been slow work to develop a great amount of active interest in industrial health, but the Committee believes that the medical profession of Michigan today is more interested than ever before in industrial health.

While the Committee feels it is not the responsibility of the medical profession to endeavor to stimulate interest in health work among industrial organizations, still it does feel that there is great need for this type of work to be done. With this in mind, the Chairman was authorized to contact the Michigan Manufacturers' Association, thru Mr. John L. Lovett, Secretary, who evidenced considerable interest. After consideration by the Board of Directors of the Manufacturers' Association, a special committee composed of Mr. Lovett, Mr. Kenneth Bowers and Mr. Seth Babcock representing the Association was appointed. This committee met with the Industrial Health Committee of the M.S.M.S. in Lansing on April 9, 1941. After thorough discussion it was decided that the initiation of a program of industrial health in two industrial counties of Michigan in which smaller industries predominated,

would be worth while. The industrial health problem is generally well handled in the larger industrial organizations, but very often more or less neglected by many smaller plants. Two counties were selected for the experiment because of the active county medical society and because of the diversified small industrial organizations operating in these two counties. The tentative program was immediately approved by the Executive Committee of The Council, M.S.M.S., whereupon letters explaining the program were sent to the officers of the two county medical societies. The societies now have the proposed program under consideration and upon their approval the representatives of the Michigan Manufacturers' Association in these counties are ready and willing to coöperate in this experiment of educating the small industrial organizations to the advantages of a sound industrial health program. The Committee hopes that with the coöperation of the Michigan Manufacturers' Association this end may be brought about in all of the industrial plants of the state, particularly now when every possible precaution should be taken to preserve much needed man-power in the stress of the present national emergency.

Respectfully submitted,

HENRY COOK, M.D., *Chairman*
NORMAN H. AMOS, M.D.
DEAN C. DENMAN, M.D.
H. H. GAY, M.D.
C. D. SELBY, M.D.
GEORGE VANRHEE, M.D.

———MSMS———

## ANNUAL REPORT OF THE COMMITTEE ON TUBERCULOSIS CONTROL, M.S.M.S., 1940-41

The Tuberculosis Control Committee has developed a small card entitled "Tuberculosis Case Finding" which may be used by the physician as an easily available reference. It contains in a few sentences the pertinent facts regarding tuberculin testing, x-rays, hospitalization and laboratory diagnoses. The card may be placed in a conspicuous place in the physician's office for ready reference.

The desirability of having one meeting per year in each county medical society devoted to the subject of tuberculosis, and preferably in one of the available sanitariums, was stressed. Many of the county societies have done this during the past year.

The Committee recommended that monthly abstracts of the Tuberculosis Society on the subject of tuberculosis be published in The JOURNAL of the Michigan State Medical Society. The possibilities of doing this are being investigated.

A list of speakers on tuberculosis was developed for the speakers' bureau of the Joint Committee on Health Education.

Respectfully submitted,

M. R. KINDE, M.D., *Chairman*
JOHN BARNWELL, M.D.
L. E. HOLLY, M.D.
W. L. HOWARD, M.D.
WILLARD B. HOWES, M.D.
BRUCE H. DOUGLAS, M.D., *Advisor*

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## ANNUAL REPORT OF COMMITTEE ON MEDICAL PREPAREDNESS, 1940-41

There has been no occasion to call together the Committee on Medical Preparedness since we met for organizational purposes, there being no matters of policy to come before us.

The brunt of the Committee's activity comes on the chairman. In the early fall the chairman, together with the chairman of similar committees throughout the country, was called to Chicago for a conference. Since that time he has been in very frequent touch, by letter and by telephone, with Doctor Olin West of the American Medical Association, on matters concerning medical preparedness, and has served as an advisor, on a great many occasions, to Lt. Col. H. A. Furlong, M.D., State Medical Officer of Selective Service in Michigan.

The major task assigned to the National Preparedness Committee by the House of Delegates, was to make a complete survey of medical personnel to determine the number of physicians available for service in various capacities—for active service, for emergency conditions, for special fields of medicine, for industrial defense, etc. Questionnaires were sent to the 6,613 physicians listed in the A.M.A. Directory as of April 1. We have turned in 88 per cent for classification. The Preparedness Committees which were early set up in each county have been of invaluable aid in following up these questionnaires. Later, an attempt through a second questionnaire was made to ascertain how many and what physicians might be available for service with the military forces, and what physicians were essential for community needs. Questionnaires were sent out to the various county preparedness committees who did the best they could to fill out the blanks satisfactorily. It seemed to us that the questionnaire might have been worded more satisfactorily. The county chairmen and county committeemen found it embarrassing to designate individuals who were so essential for community needs that they should not be permitted to volunteer for service, or be called into the service, and equally embarrassing to designate men who should be available for military service. However, they did their best, and on the whole the information so obtained was valuable.

It is certain that the activity of the State Society's Preparedness Committee will be increased as, at an increasing tempo, the government makes its preparation for defense.

Many of our reserve medical officers who were called to active service, were practicing in communities where they were most essential for community health. Very earnest effort, which involved much correspondence and telephone communication, has been directed to holding these men in their communities. In more than one instance we have gone up to the Surgeon General, and have, from time to time, asked for aid from the Governor of the State and from the A.M.A. In general we have not been successful in retaining these men. While we had no difficulty in establishing the community's needs, the army felt that its needs were greater and called our attention to the fact that these community needs should have been recognized by the reserve officer himself during the period when the opportunity was given to him to resign.

About half of our physicians are engaged in the task of examining selectees for the draft boards. With a self-sacrificing spirit of patriotism the profession takes on this work without remuneration, and once again gives evidence that it recognizes that as a profession it has a very special responsibility to society and to the state.

Respectfully submitted,

BURTON R. CORBUS, M.D., *Chairman*
L. FERNALD FOSTER, M.D.
F. G. BUESSER, M.D.
H. H. RIECKER, M.D.
A. B. SMITH, M.D.
P. R. URMSTON, M.D.

## ANNUAL REPORT OF ADVISORY COMMITTEE TO WOMAN'S AUXILIARY, 1940-41

During the past year no important questions have arisen necessitating a meeting of the members of this Committee. At various times a few relatively unimportant matters were discussed with the President of the Woman's Auxiliary.

Respectfully submitted,

R. C. Jamieson, M.D., *Chairman*
C. W. Brainard, M.D.
L. C. Harvie, M.D.
Wm. S. Jones, M.D.
Edwin Terwilliger, M.D.

———MSMS———

## ANNUAL REPORT OF THE ETHICS COMMITTEE, 1940-41

The Ethics Committee of the Michigan State Medical Society is pleased to announce that no occasion arose during the past year for holding any meetings to discuss any alleged infractions of the Code of Ethics of the A.M.A.

One very minor incident, involving three or four letters, ironed out a question in the mind of a young doctor who was buying the office of a deceased physician.

From the excellent behavior of the members of the Michigan State Medical Society during the past few years, the job which this committee holds might be likened to that of the last five vice-presidents of a bank—an honorary title with nothing much to do. However, like the vice-presidents, we are willing to take off our coats and fight a fire if one breaks out. We will not, according to past custom, answer the alarm unless we receive notice of the alleged fire in writing with the assurance that the writer of such notice will be willing to offer his proof that such an affair exists.

Respectfully submitted,

Horace Wray Porter, M.D., *Chairman*
M. G. Becker, M.D.
F. M. Doyle, M.D.
J. J. McCann, M.D.
Allan McDonald, M.D.

———MSMS———

## ANNUAL REPORT OF THE MENTAL HYGIENE COMMITTEE, 1940-41

The Committee has had only one regular meeting during the past year. No program was developed because it had previously been determined that the Committee should limit its activities to matters referred to it by the Council or Executive Committee and none has been referred.

The Committee has been deeply concerned about the mental health problems of the selectees and also with the selectees who have been rejected as unfit for general military service by reason of some mental or nervous disorder other than organic. We refer here to the psycho-neurotic, the neurotic and the unstable personality types.

Many draft boards have still the traditional attitude of sending a young fellow to the army to make a man of him. Your committee wishes to emphasize to the medical profession of the State the fact that individuals who have adjusted poorly to civilian life are more than likely not only to be poor soldiers but actually a danger from within to organized military forces.

The armed forces are not training centers for social problems; citizens and the medical profession must be alert to recognize and to recommend for rejection those who are likely to become psychiatric casualties under stresses of military life and later to become expensive charges on the government for psychiatric care and compensation.

Respectfully submitted,

Henry A. Luce, M.D., *Chairman*
R. G. Brain, M.D.
Esli T. Morden, M.D.
R. W. Waggoner, M.D.
O. R. Yoder, M.D.

———MSMS———

## ANNUAL REPORT OF THE PUBLIC RELATIONS COMMITTEE, 1940-41

The major projects of a Public Relations character during the past year were those having to do with legislation and voluntary group medical care. The latter was handled directly by the corporation of Michigan Medical Service.

Due to the character of legislative activity and the dispatch with which it had to be executed the publicity attending the 1940-41 program was carried out directly by the Legislative Committee and the Executive office. The procedure was consistent with the established precedent of the society.

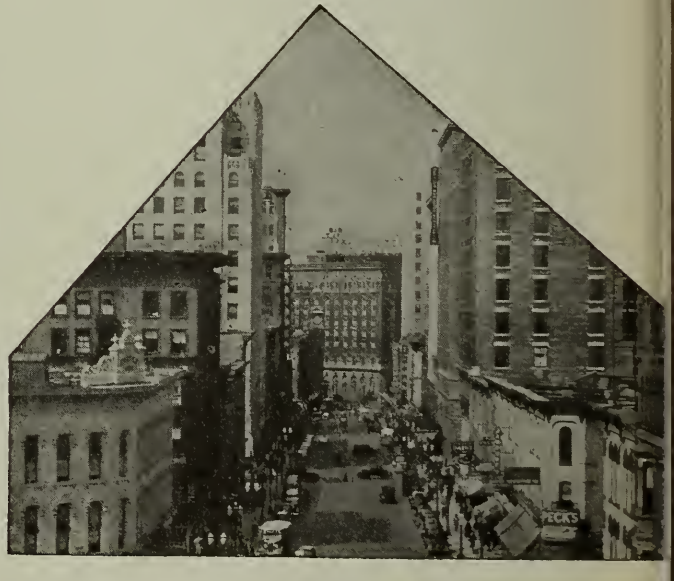
In order that the legislative program might have its rightful precedence over the other routine society activities and to decrease the number of contacts to be made with the various component county medical societies, the general public relation functions were discharged largely by the Councilors and officers in the official visits.

The committee members did, however, on many occasions assist in integrating in their districts various of the activities of the state society.

The ever-increasing scope of the State Society functions will, during the coming year, demand much of the Public Relations Committee.

Respectfully submitted,

L. Fernald Foster, M.D., *Chairman*
A. E. Catherwood, M.D.
C. G. Clippert, M.D.
H. S. Collisi, M.D.
S. W. Hartwell, M.D.
H. C. Hill, M.D.
L. J. Johnson, M.D.
A. H. Miller, M.D.
H. L. Morris, M.D.
Fred Reed, M.D.
D. R. Smith, M.D.
A. W. Strom, M.D.



*Monroe Avenue, Grand Rapids, Looking West*

# MICHIGAN'S DEPARTMENT OF HEALTH

HENRY A. MOYER, M.D., Commissioner, Lansing, Michigan

## 100,000 BIRTHS IN 1941?

Physicians of the state will sign a record number of birth certificates this year, according to an estimate based on the first five months of returns from all eighty-three counties.

From January through May, 38,879 births were reported this year as compared with 37,570 in the same period in 1940. On this basis, the number of births for 1941 will exceed 100,000 for the first time in Michigan, the estimate being 102,350.

The present record year in births was 1927, when 99,940 births were reported. Last year's total of 99,-106 was only a few hundred short of this all-time high.

**At least three factors are responsible for the increase in births this year. Marriages increased last year, there is a gain in population due to the job attractions in defense areas (whole families are moving to Michigan), and many homes are in improved financial situation because of business and industrial prosperity. In offices and stores women are leaving their jobs in considerable numbers, often because their husband's increased income now makes it unnecessary for them to work.**

Physicians were first required to report births in 1906, when the duty of filling out original certificates was placed upon them by law. Previously, births had been reported by supervisors and by city officials. The physician's original certificate ultimately is filed in the State Health Department vaults at Lansing, where there are 10,000,000 vital records.

After making out the certificate (within five days after the birth), the physician sends it to a local registrar, who is the township, village or city clerk or full-time city health officer. The registrar makes two copies, keeping one, sending one to the county clerk, and forwarding the original to Lansing. Either the registrar or the county clerk may issue certified copies just as does the State Health Department.

## NEW HEALTH UNITS

By action of their boards of supervisors, Washtenaw and Kalamazoo counties become the 64th and 65th counties in Michigan to provide full time health services.

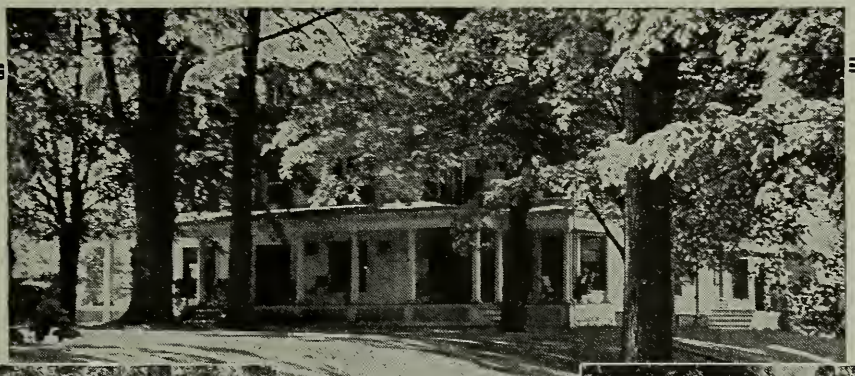
In both instances, the new health departments will confront problems created or aggravated by national defense activities. Kalamazoo county shares the military-civilian problems of the Fort Custer area with Calhoun county, which has a full time health department. Washtenaw county's added health responsibilities come chiefly from industrial concentrations, especially the Ford airplane work under way at Ypsilanti.

Kalamazoo's new health unit will be the first city-county health department in Michigan. In eight counties, there are both city and county full-time health departments in operation, but the Kalamazoo department will be the first with a common director and the same services available to both city and rural residents. The director will be Dr. I. W. Brown, health officer of the city of Kalamazoo who has just returned from a year's public health study at Johns Hopkins.

Both the Washtenaw and Kalamazoo departments were established as of July 1. The director for the Washtenaw unit will be named later.

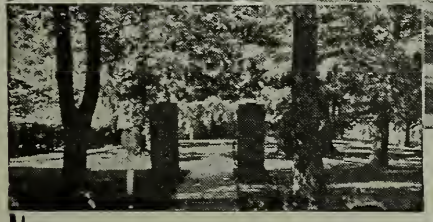

**WEHENKEL SANATORIUM**

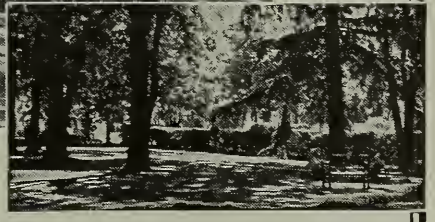
ROMEO MICH.



PRIVATE ESTATE

RESTFUL AND QUIET





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*For Detailed Information Regarding Rates and Admission Apply*

**DR. A. M. WEHENKEL, Medical Director, City Offices, Madison 3312-3**

## SMALLPOX AT PORT HURON

Port Huron's smallpox outbreak in April and May resulted in some thirty reported cases, most of them mild, and a wholesale vaccination of school children, of factory workers and of other adults.

Three physicians were engaged by Dr. A. L. Callery, who serves Port Huron as part-time city health officer, to assist in free vaccination clinics at the city's public and parochial schools. Ninety-five per cent of the children were vaccinated in school clinics, and many of the remainder went to family physicians for vaccination. In large industries, plant physicians vaccinated employes, and other adults were vaccinated without charge at the city health office and at the school clinics. Nearby schools and communities conducted vaccination programs also. There were many susceptible persons in the population, although vaccination had been preached for years at P.T.A. and other meetings and the St. Clair County Medical Society had established a low fee of $1.00 for immunizing procedures.

The first cases were diagnosed April 11, on Good Friday, in two school girls. The school vaccination clinics were completed in the latter part of May. On June 30, three new cases were reported, but apparently unconnected with others in the outbreak.

Most of the cases were mild, but at least one was serious. It was that of a 78-year-old man, who had what Dr. Callery characterized as "the kind of smallpox we used to see 35 years ago."

## OBSTETRICS STUDIES OPEN TO FOUR

Open to practicing physicians in the state, four appointments will be made to the two-week course in obstetrics offered September 22 to October 4 at the University Hospital by the University of Michigan Department of Postgraduate Medicine and the Michigan Department of Health. Reservations should be sent now to Dr. Lillian R. Smith, director of the Bureau of Maternal and Child Health, Michigan Department of Health, Lansing. There is no fee for the course. In three years, more than 125 Michigan physicians have had the training of these postgraduate courses.

## LESS MEASLES IN JUNE

Measles cases reported in June totaled 4,570, less than half the May total and apparently indicating a quick end to the 1941 epidemic. The total of reported cases through June was 68,492, about ten per cent under the six-month total in the epidemic years of 1935 and 1938. In those years the reported cases totaled 80,000 for 12 months.

## COMMUNICABLE DISEASE REPORTS

**Communicable disease reports of the Michigan Department of Health show that in the first five months of 1941, pneumonia, tuberculosis, diptheria and scarlet fever were at lower reported levels than in 1940.**

**Among the diseases showing increases were measles, whooping cough and smallpox. Through May, there were 81 reported cases of smallpox compared with 16 for the same period in 1940.**


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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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# ✶ COUNTY AND PERSONAL ACTIVITIES ✶

**100 Per Cent Club for 1941**

| | |
|---|---|
| Allegan | Luce |
| Barry | Manistee |
| Clinton | Menominee |
| Delta-Schoolcraft | Muskegon |
| Dickinson-Iron | Oceana |
| Eaton | Ontonagon |
| Gogebic | Ottawa |
| Grand Traverse-Leelanau-Benzie | Saginaw |
| Huron | Saint Clair |
| Ingham | Saint Joseph |
| Jackson | Sanilac |
| Lapeer | Shiawassee |
| Lenawee | Tuscola |
| | Wexford-Missaukee |

The above County Medical Societies have certified 1941 membership for all of their 1940 members. Several more societies are not on the 100 per cent roll because of only one delinquent member.

*The following members* of the Dickinson-Iron Medical Society attended the one-day clinic of the Wisconsin State Medical Society at Green Bay on April 30: W. H. Alexander, M.D., E. B. Andersen, M.D., W. H. Huron, M.D., and D. R. Smith, M.D.

*Wm. A. Hyland, M.D.*, Grand Rapids, Chairman of the M.S.M.S. Cancer Control Committee, addressed the Regional Meeting of the Woman's Field Army for the Control of Cancer, in Battle Creek on June 20. His subject was "Cancer Control Legislation."

* * *

*Members of the Michigan State Medical Society* are cordially invited to attend the sessions of the Eighty-Ninth Annual Convention of the American Pharmaceutical Association which will be held in Detroit the week of August 17-23. Convention headquarters will be at the Hotel Statler.

* * *

*Physicians who are in military service* may wish to cancel their malpractice insurance for the period of their service. Call the local agent of the company with which you are insured for information. A refund of unearned premium from date of induction into service is being granted by some insurance companies and the same practice may be followed by others.

* * *

*The Spring Meeting* of the Michigan Pathological Society was held at Bronson Methodist Hospital, Kalamazoo, in June. Cases were presented by Drs. C. I. Owen, Hazel Prentice, C. A. Payne, Arthur Humphrey, D. H. Kaump, and D. C. Beaver on the subject "Pathology of Serous Membrane, Including Joints, Tendon Sheaths, Peritoneum, Pleura, and Pericardium."

The October meeting will be held at Receiving Hospital, Detroit, and will be a seminar type of meeting on some phase of central nervous system pathology with Dr. Gabriel Steiner conducting and interpreting.


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*Examination for appointments* in the Medical Corps of the United States Navy will be held as follows: For Acting Assistant Surgeon for Interne Training: October 6 to 9, 1941, inclusive; January 5 to 9, 1942, inclusive. For Assistant Surgeon: October 6 to 9, 1941, inclusive, and January 5 to 9, 1942, inclusive. Examinations will be held at all the larger naval hospitals and at the Naval Medical Center, Washington, D. C. Applications for authorization to take the examination must be in the Bureau of Medicine and Surgery three weeks prior to the date of the examination. Write to the Bureau of Medicine and Surgery, Navy Department, Washington, D. C., for application forms.

———MSMS———

## SUPPLEMENTARY ROSTER

The following members were certified to the Secretary of the Michigan State Medical Society after the roster which appeared in the May issue, and the supplementary rosters in the June and July issues of THE JOURNAL had gone to press:

### Calhoun

Capron, M. J. ..... Battle Creek
Harris, R. H. ..... Battle Creek
McNair, L. N. ..... Albion

### Delta-Schoolcraft

Tucker, A. R. ..... Manistique

### Gogebic

Maccani, Wm. L. ..... Ironwood
Strong, Joseph M. ..... Wakefield

### Kalamazoo

Snyder, R. F. ..... Kalamazoo

### Kent

Balyeat, Gordon ..... Grand Rapids
Fellows, Kenneth ..... Grand Rapids
Hardy, Faith ..... Grand Rapids
VandenBerg, Henry ..... Grand Rapids
Wright, Thomas B. ..... Grand Rapids

### Menominee

Corkill, C. C. ..... Menominee

### Northern Michigan

Slade, H. G. ..... Onaway

### Wayne County

Aldrich, E. Gordon ..... Detroit
Bauman, Walter L. ..... Detroit
Bergo, Howard L. ..... Detroit
Clarke, Daniel M. ..... Detroit
Clifford, T. P. ..... Detroit
Draves, Edward F. ..... Detroit
Edgar, Irving I. ..... Detroit
Edmonds, Wm. N. ..... Detroit
Ewing, C. H. ..... Detroit
Finn, Eva M. ..... Detroit
Gannan, Arthur M. ..... Detroit
Hulse, Warren L. ..... Detroit
Johnston, Charles G. ..... Detroit
Keating, Thomas F. ..... Detroit
Kennedy, Wm. Y. ..... Detroit
Kovan, Dennis D. ..... Detroit
Krass, Edward W. ..... Detroit
MacFarlane, Howard W. ..... Detroit
Moore, James A. ..... Detroit
Nosanchuk, Barney ..... Detroit
Roney, Eugene N. ..... Detroit
Schiller, A. E. ..... Detroit
Schulte, Carl H. ..... Detroit
Sellers, Graham ..... Detroit
Shipton, W. Harvey ..... Detroit
Stein, James R. ..... Detroit
Stocker, Harry ..... Detroit
Szlachetka, Vincent E. ..... Detroit
Thomas, Delma F. ..... Detroit
Thompson, H. E. ..... Detroit
Tichenor, E. D. ..... Detroit
Toepel, O. T. ..... Detroit
Van Nest, A. E. ..... Detroit
Warren, Benjamin H. ..... Grosse Pointe
West, Howard G. ..... Detroit
Williams, Mildred C. ..... Detroit


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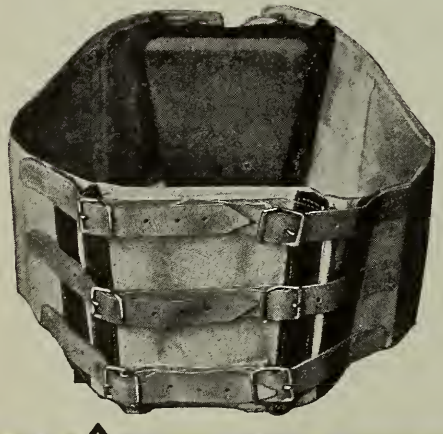

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## SELECTIVE SERVICE EXAMINATIONS

In any hastily conceived and rapidly carried out project of the magnitude of general conscription for military service, certain inadequacies of the machinery are prone to appear. That the accomplishments made to date should reflect more to the credit of the participants is perhaps obvious. The local examiner, an important participant, has too frequently found himself caught in the wake of a charitable act, damned for his alleged errors and receiving meager acknowledgement of his efforts.

Administrators of the Indiana Selective Service System have carried on their job in the face of regulatory restrictions too often ill-defined or distinctly ambiguous. They have needed and have received the services of Indiana physicians, and frequently they have tendered their grateful recognition.

The lay public has been prone to judge the results harshly; they are being led to believe that our men are soft and incapable of hardship, that our national standard of health has suffered tremendously since World War I, and furthermore, due to the discrepancy of results between the local examining boards and the induction centers, they tend to discredit the professional ability of the local doctor. So seriously has the public taken these examination results that more than one rejected conscript has found himself unable to secure industrial employment on his return home.

Increased information should be given the public so that they may better judge. They need to be informed that the Army of today requires a superior mental and physical specimen to that required in 1917, and they need further to be informed that rejection for military service need not disqualify any man for his usual job in his home surroundings.

As to the rejection of selectees at induction centers, certain statistics recently issued by Captain Glen Ward Lee, medical adviser to the Indiana Selective Service System, need wider distribution with appended explanatory notes.

From November 19, 1949, to April 19, 1941, Indiana induction centers received 14,193 selectees for examination. Rejections totaled 2,170 for a rate of 15.2%, which is comparable to other states of the Fifth Corps area. The rejections may be classified as follows:

| | | |
|---|---|---|
| 1. | Mental and nervous disorders | 18.96% |
| 2. | Diseases of teeth and gums | 15.75% |
| 3. | Genito-urinary disease | 12.32% |
| 4. | Eyes and vision | 10.03% |
| 5. | Musculoskeletal | 9.89% |
| 6. | Ear, nose and throat | 8.01% |
| 7. | Hernia and abdominal organs | 7.65% |
| 8. | Cardiovascular | 6.87% |
| 9. | Feet | 3.25% |
| 10. | Lungs and chest | 2.47% |
| 11. | Skin defects | 1.04% |
| 12. | Height and weight | .95% |
| 13. | Endocrine disorders | .67% |
| 14. | Administrative* | 1.04% |
| 15. | Miscellaneous* | 1.10% |

*Under Administrative and Miscellaneous causes for rejection or deferment are included such causes as recent operation, recent injuries, or recent illness.

In the above rejections, it should be emphasized that many factors operated other than differences of professional interpretation. Doctors cannot be expected to solve dental regulations which have confused more than the occasional dentist. The addition of dentists to local examining boards is welcome help. The high rate of rejection for psychiatric reasons calls attention to the emphasis on this phase of induction examination. On behalf of the local examiner, it must be said that the form he uses does not bring this special type of


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OBSTETRICS—Two Weeks' Intensive Course starting October 6th. Informal Course every week.

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critical survey to the foreground. In regard to the genito-urinary disorders, it is no secret that acute infections have appeared subsequent to the local examination. It is noteworthy that those regulations well understood by the local examiner have resulted in a very low rate of rejection while those with contradictory interpretations have resulted in the major causes for rejection. It is inevitable that there be diverse interpretation of physical findings as medicine will never be an exact science.

We firmly believe that the local examiner is deserving of more credit for his voluntary patriotic service. That he is being irked by unwarranted criticism is not surprising. Though he has not yet arrived at the place of refusing his further services, it is easy to see how he might be provoked to this alternative.—From the *Journal of the Indiana State Medical Association,* June, 1941.

## In Memoriam

**Francis J. Diamond** of Ravenna was born in Gladstone in 1899. He was graduated from Loyola University in 1927 and interned at the Illinois Masonic and the Chicago Polyclinic Hospitals. Doctor Diamond located in Gladstone with his father, John Alexander Diamond, M.D., and then moved to Grand Rapids where he served as resident physician at the Michigan Soldiers Home for one year. He had been located in Ravenna only one month when his sudden death occurred, June 21, 1941.

* * *

**Alvin H. Rockwell** of Kalamazoo was born in Allegan County, January 7, 1851. He was graduated from University of Michigan Medical School in 1883. He first located at Alba, where he practiced for a few months and then moved to Mancelona. In 1887 he organized the Northern Michigan Medical Society and was made its first president. At Mancelona he had his first experience in public health work acting as village health officer. In October, 1889, Doctor Rockwell moved to Kalamazoo where he was health officer for the city. In 1918 Dr. Rockwell became full-time Director of Public Health and Welfare, in which position he served until his resignation in 1932. He served as secretary of the Academy of Medicine of Kalamazoo County in 1899 and as president in 1909. In 1927 he was elected an Honorary Member of the Michigan State Medical Society and in 1935 was elected an Emeritus Member, and served as Councillor of the fourth district for twelve years. He died May 3, 1941.

* * *

**Elwood D. Wilson** of Cement City was born in 1870 and was graduated from Michigan College of Medicine and Surgery in 1897. He located in Bath and then moved to Fowlerville. In 1921 he located in Jackson and practiced there until he retired in 1940. Dr. Wilson died of burns caused by a high tension power line on his farm in Cement City on June 19, 1941.

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## RECOMMENDATIONS FOR ROUTINE EXAMINATION OF APPLICANTS FOR MARRIAGE CERTIFICATES

**By The M.S.M.S. Syphilis Control Committee**

*Male*

1. History
   A. Of syphilis or any suspicious lesion.
   B. Of urethral discharge.
2. Examination
   A. For skin or mucous membrane lesion. *If any genital lesion be present darkfield, direct or indirect, should be done at once.*
   B. Take blood for serodiagnosis. If genital lesion be present and Spirocheta pallida reported "not found" in darkfield, serologic follow-up to cover a period of at least six weeks.
   C. Strip urethra for possible discharge. If discharge be present, do not issue certificate until every effort has been made to ascertain possible presence of gonococci.
   D. Do two-glass urine test. If shreds are present in the first glass, macerate a shred upon a slide and obtain examination for gonococci.
   E. If past history of urethral discharge, do microscopic examination of fresh prostatic fluid for pus. If pus be present, give provocative tests.

*Female*

1. History
   A. Of syphilis or any suspicious cutaneous lesions.
   B. Of vaginal discharge.
2. Examination
   A. For skin or mucous membrane lesion. Make darkfield examination of any such suspicious lesion.
   B. Obtain blood for serodiagnosis. If suspicious lesion be present and Spirocheta pallida reported "not found" in darkfield, serologic follow-up to cover a period of at least six weeks.
   C. Examination of introitus to determine whether or not hymen is intact.
   D. If intact, take vaginal and URETHRAL smear for examination for gonococci.
   E. If perforate, make examination with speculum and take cervical and URETHRAL smears for such examination.

NOTE: If pus is found in the cervical smear at least four smears should be repeated at daily intervals during which no douches are taken. All of these smears should fail to demonstrate gonococci before a certificate is issued. Smears should be taken even if Trichomonas is demonstrated.

The outline above may under ordinary circumstances seem formidable to the average physician but in fact few cases will require follow-up examinations.

Since several instances have occurred in which the examining physician had certified the applicant, only to have either gonorrhea or syphilis develop in the marital partner subsequently, it has been suggested that this recommended outline be followed.

The history, as outlined in the case of both male and female, may be obtained with a minimum of time. The examination may be made briefly but should be made thoroughly. It take no time to strip a male urethra and practically none to require the male applicant to void in two glasses. The examination of the prostatic fluid is probably not necessary unless a history of previous gonorrhea is obtained, in which case it should be done. The same principles apply to the female.

It must not be taken for granted that the female may not be or ever have been infected with gonorrhea.

As several questions have been raised since the

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enactment of the law requiring certification for marriage regarding the attitude of physicians with relation to this law, publication of the outline was requested in THE JOURNAL by the Committee on Syphilis Control of your State Society.

**Equitable fees should be charged and if repeated examinations are necessary it is reasonable that the applicant should meet the expense involved to the examining physician. However, it has been repeatedly called to the attention of your committee that exorbitant fees have been levied for the mere taking of blood and this would appear unjustifiable and unwise from the viewpoint of the profession as a whole. Certainly it is not within the province of this committee to suggest or fix the fee to be charged. A bill to fix the fee for the examination was introduced in the state legislature and fortunately was defeated.**

It is suggested that since most of these potential new families will in all probability become permanent patients of the examining physician, and since the average marriage applicant is not in the higher income brackets, that the good will principle in this matter contributing to human happiness and the establishment of a new social unit be considered.

Your committee is at all times open to suggestion and sincerely hopes that you will communicate with it either through the offices of the Michigan State Medical Soceity or through the office of the chairman.

ARTHUR WOODBURNE, *Chairman*
HAROLD R. ROEHM
LOREN W. SHAFFER
ROBERT S. BREAKEY
EUGENE V. HAND
J. W. RICE

★

**NOTICE TO COUNTY SOCIETY SECRETARIES**

Honorary, Retired, and Emeritus Membership in the Michigan State Medical Society: Please certify to the Executive Office, 2020 Olds Tower, Lansing, no later than August 26, the names of any members for whom Special Memberships in the State Society will be sought next September. The membership records of physicians recommended by county societies for special memberships must be checked before final submission to the House of Delegates.

★



*Say you saw it in the Journal of the Michigan State Medical Society*

# THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

ACCIDENTAL INJURIES. The Medico-Legal Aspects of Workmen's Compensation and Public Liability. By Henry H. Kessler, M.D., Ph.D., F.A.C.S., Medical Director, New Jersey Rehabilitation Clinic; Formerly Medical Advisor, New Jersey Workmen's Compensation Bureau; Attending Orthopaedic Surgeon, Newark City Hospital, Newark Beth Israel Hospital, Etc. Hasbruck Heights Hospital, Hospital and Home for Crippled Children; Member, Council of Industrial Health of the American Medical Association; Hunterian Lecturer, 1935; Fellow of American Public Health Association; Diplomate of American Board of Orthopaedic Surgery; Fellow of American Academy of Orthopaedic Surgeons. Second edition, enlarged and thoroughly revised. Philadelphia: Lea & Febiger, 1941. Price: $10.00.

This book discusses the medico-legal aspects of accidental injuries and is principally for the use of physicians as well as other agencies. The author reviews practically every disabling condition which occurs as a result of accident, and after listing the mechanics and the prognosis goes into considerable detail regarding the percentage of disability which results from that particular injury. It is recommended for all medical and social agencies interested in industrial health.

* * *

ESSENTIALS OF ENDOCRINOLOGY. By Arthur Grollman, Ph.D., M.D., Associate Professor of Pharmacology and Experimental Therapeutics in the Medical School of the Johns Hopkins University; Formerly Associate Professor of Physiology and Instructor in Chemistry in the Same Institution. 74 Illustrations. Philadelphia, London, Montreal: J. B. Lippincott Company, 1941. Price: $6.00.

The author presents, in this monograph, a critical evaluation of his subject. He has succeeded in making clear the practical application of the present-day knowledge of the subject without sacrificing the laboratory phase to any great degree. It is recommended for those who seek a more intensive knowledge of endocrinology.

* * *

SYNOPSIS OF DISEASES OF THE HEART AND ARTERIES. By George R. Herrmann, M.S., M.D., Ph.D., F.A.C.P., Professor of Medicine, University of Texas; Director of the Cardiovascular Service, John Sealy Hospital; Consultant in Vascular Diseases, U. S. Marine Hospital. Second edition. St. Louis: The C. V. Mosby Company, 1941. Price: $5.00.

This is the second edition of a volume first published in 1936, adding to the previous edition numerous advances and discoveries of the past five years. For a handy-sized book it is exceptionally complete and well illustrated. A new chapter which discusses the examination of the heart for military service is practical and interesting.

* * *

FRACTURES AND OTHER BONE AND JOINT INJURIES. By R. Watson-Jones, B.Sc., M.Ch.Ortho., F.R.C.S. Civilian Consultant in Orthopaedic Surgery of the Royal Air Force. Member of War Wounds Committee of Medical Research Council. Member of British Medical Association Committee on Fractures. Member of Council and Chairman of Standing Committee on Fractures of the British Orthopeadic Association. Lecturer in Orthopaedic Pathology, Lecturer in Clinical Orthopaedic Surgery, and Secretary of the Board of Orthopaedic Studies, University of Liverpool. Neurological Surgeon to Special Head and Spinal Centre, Emergency Medical Service. Honorary Orthopaedic Surgeon, Royal Liverpool United Hospital (Royal Infirmary). Visiting Surgeon, Robert Jones & Agnes Hunt Orthopaedic Hospital. Consulting Orthopaedic Surgeon, Royal Lancaster Infirmary, North Wales Sanatorium, Birkenhead, Hoylake & West Kirby, Wrexham & East Denbighshire, and Garston Hospitals. Second edition. A William Wood Book. Baltimore: The Williams & Wilkins Company, 1941. Price: $13.50.

This is the second edition of a volume first published a year ago. The changes in accepted treatment both of infected fractures and war wounds has necessitated rewriting this entire chapter and, of course, recent other

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*Chemists to the Medical Profession* MIC 8-41

developments in chemotherapy and transfusion have brought considerable change in many parts of this book. It is an English type of book with profuse illustrations and considerable thoroughness. The chapter referred to above on "Open and Infected Fractures and War Wounds" is well worth reading by every general practitioner. And to the man interested in fractures the text should be of much value.

* * *

AN INTRODUCTION TO MEDICAL SCIENCE. By William Boyd, M.D., M.R.C.P. (Edin.), F.R.C.P. (Lond.), Dipl. Psych., F.R.S. (Canada); Professor of Pathology and Bacteriology in the University of Toronto, Toronto; Formerly Professor of Pathology in the University of Manitoba; Pathologist to the Winnipeg General Hospital, Winnipeg, Canada. Second edition, thoroughly revised. Illustrated with 124 engravings. Philadelphia: Lea & Febiger, 1941. Price: $3.50.

This is a textbook intended for nurses written from the standpoint of the basic sciences. It is the type of presentation which makes the orientation of the student nurse much more complete than the usual textbook can. The medical treatment is not emphasized but the part that nursing care plays is completely presented. This volume is recommended to the teaching of nurses and for those who must have some knowledge of medicine without a complete study of the basic sciences.

* * *

*MODERN SEROLOGICAL TESTS FOR SYPHILIS. And Their Interpretation by the Physician

This booklet is a timely review in detail of the various serological tests on the blood and spinal fluid for syphilis. Of special interest to the student and laboratory physician is the technique used in the various complement fixation and flocculation tests; and the comparison of the accuracy and specificity of these tests. Any physician interested in syphilis will profit from a study of the portion dealing with the interpretation of the tests in diagnosis, treatment and prognosis. The discussion of the false positive and false negatives and their causes and the discussion about the sero-resistant cases is of interest to all physicians.

* * *

*THE NEWER CHEMOTHERAPY OF VENEREAL DISEASES.

1. Treatment of Gonorrhea with Sulfanilamides and Related Drugs. By H. S. Young, M.D.; H. C. Harill, M.D.; J. H. Semans, M.D., and O. S. Culp, M.D.
2. Sulfapyradine in the Treatment of Gonococcal Infections. By R. A. Wolcott, M.D.; J. F. Machoney, M.D., and C. J. Van Slyke, M.D.
3. Value of Sulanilamide in Gonorrheal Arthritis. By O. S. Culp, M.D., and H. S. Young, M.D.
4. Venereal Lymphogranuloma. Results of Sulfanilamide Therapy. By W. E. Graham, M.D., and E. W. Norris, M.D.
5. Treatment of Venereal Lymphogranuloma with Sulfanilamide. By A. W. Grace, M.D., and F. H. Suskind, M.S.
6. Sulfanilamide Treatment of Chanchroid. By O. S. Culp, M.D., and C. E. Burkland, M.D.

Sulfathiazole, sulfapyradine, and sulfanilamide are, in the order given, of great value in the treatment of gonorrhea. Sulfathiazole is the best because of its low toxicity and its marked bactericidal and bacteriostatic effect in the urine. It often is able to cure in cases resistant to the other two drugs. Sulfapyradine is of value in those cases resistant to sulfanilamide and also in fresh cases. It was found to be as efficacious in chronic cases as in acute ones. Of twenty-two hospital cases with gonorrheal arthritis 68 per cent were cured or markedly improved with sulfanilamide therapy. The results were more striking in the acute cases.

Sulfanilamide is of value in all types of venereal lymphogranuloma. Surgery in this disease should be limited to opening the fluctuant buboe and to relief of rectal stricture.

Sulfanilamide is a rapid and efficacious method of treating complicated and uncomplicated chancroid.

*These booklets are available without charge to all members of the Michigan State Medical Society by request to Dr. Gibson, Michigan Department of Public Health, Lansing, Michigan.

## LETTERS TO THE EDITOR

Editor, Journal Mich. State Med. Society.
My dear Sir:

Although it is somewhat early, we want to start talking about our big book for November, THE DOCTORS MAYO.

"The Mayos" is a household word the country over—the Mayo story an American epic which has not been told. Everyone has heard of Dr. Will and Dr. Charlie, but the phenomenon of their achievement, the small town clinic that grew to international fame, has been little understood. The modesty of the men and their strict conformity to medical ethics discouraged publicity, and no one was able to publish the story during their lifetime.

That it would have to be told sometime was inevitable. During their lifetime neither the Doctors Mayo nor any of their staff could be brought to undertake it. In the end, in order to divest themselves of any connection with it, they authorized the University of Minnesota to publish, through the University of Minnesota Press, a book on the history of the Doctors Mayo, the Mayo Clinic, and the Mayo Foundation. The responsibility then fell on the university to produce an objective and balanced account of the contribution of the Mayos and of their colleagues throughout the world, to medical science and education.

Full-time exploratory work in Rochester was begun immediately. Research, interviews, and the accumulation of source material have been carried on intensively and continuously for nearly five years. Complete coöperation has been extended to the university, but the book now to be published is an independent study, written by H. B. Clapesattle, a trained historian and chief editor of the University of Minnesota Press.

The results have been beyond even our greatest hopes. In Rochester has been uncovered a rich vein of Americana. It is at once the story of the frontier and of a century of medicine in this country, from the days when hospital patients were nursed by jailbirds to the current era of aviation medicine. It is the story of how the Old Doctor Mayo, himself a social and medical pioneer, passed on to his two sons a passion to learn from everyone and everything, and how they passed it on to their colleagues till it became the living spirit of a great institution. The author has brought all these elements into focus in an important human drama of unequaled interest.

We thought you would like to know that this book is scheduled for November seventeenth and that you will have further word about it later.

Sincerely yours,
Dorothy A. Bennett
Sales and Promotion Manager

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**Sinus cases**
**Corneal ulcer**
**Carbuncle**
**Rectal fistula**
**Diabetic gangrene**
**After removal of tonsils**
**After tooth extraction**
**Cleansing mastoid**
**Middle ear**
**Cervicitis**

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Each month THE JOURNAL has carried an article, and a number of bulletins have been mailed directly to doctors, setting forth interesting data about Michigan Medical Service. A résumé of some of the most important points which have come up for frequent discussion is as follows:

### Medical Control and Responsibility

• The House of Delegates of the Michigan State Medical Society adopted the basic principle that the prepayment plan to be sponsored by the medical profession should not be another commercial insurance cash indemnity arrangement but should be a direct service program.

* * *

• Accordingly, Michigan Medical Service was so organized that the medical profession has full control of the administration of the program in return for putting up their services as a reserve guarantee to subscribers.

### Payments for Services

• The general level of the payments to doctors for services to subscribers was outlined by The Council and ratified by the House of Delegates of the Michigan State Medical Society.

* * *

• A Schedule of Benefits in keeping with this general level of payments, which is equivalent to the prevailing charge by doctors in Michigan for persons whose income ranges from $1,500 to $1,700 annually, was carefully set up through the coöperation of numerous committees in the various fields of practice.

* * *

• This Schedule is used as a guide for the authorization of payments by the Medical Advisory Boards, but the payment authorized takes into consideration the particular services as set forth in the doctor's Monthly Service Report.

### Experience to Date

• In the short space of sixteen months of operation, the medical service plan has accumulated an immense amount of valuable data for the benefit of the private practice of medicine.

* * *

• Committees from medical societies in twenty-two states and Brazil have come to Michigan for help in connection with establishing medical service programs to combat the forces seeking to disrupt the private practice of medicine.

* * *

• Increased good will of the public, the newspapers, of industry, and of the legislature has been gained for the medical profession through the medical service plan.

*(Continued on Page 674)*

**MICHIGAN MEDICAL SERVICE REGISTRATION HONOR ROLL**
**(As of August 10, 1941)**

**100 per cent**

Manistee
Mason
Mecosta-Osceola-Lake
Menominee

**90 to 99 per cent**

Bay-Arenac-Iosco
Calhoun
Gogebic
Grand Traverse-Leelanau- Benzie
Marquette-Alger
Oceana
St. Joseph

**80 to 89 per cent**

Allegan
Barry
Branch
Chippewa-Mackinac
Delta-Schoolcraft
Dickinson-Iron
Eaton
Gratiot-Isabella-Clare
Hillsdale
Houghton-Baraga-Keweenaw
Huron
Ingham
Ionia-Montcalm
Kalamazoo
Kent
Lenawee
Livingston
Midland
Muskegon
Newaygo
Northern Michigan
Ontonagon
Ottawa
Saginaw
Tuscola
Wexford-Missaukee

**75 to 79 per cent**

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CEREVIM, a pre-cooked cereal food, possesses those properties desirable in a first solid food for babies. Babies like it from the start, and because of its appealing taste, may be expected to continue eating it through early childhood. It is easily digested, highly nutritious and smooth in texture.

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Cerevim's comprehensive formula provides the B vitamins in generous amounts. Each ounce contains 100 International Units Thiamine ($B_1$) and 60 Bourquin Sherman Units Riboflavin ($B_2$). Calcium, phosphorus, iron and copper are provided in easily assimilated form; proteins, carbohydrates and fats in a suitable ratio—all derived from natural sources only.

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- **advertised only to the medical profession;**
- **sold only through druggists.**

PACKAGES:
Cerevim is sold in ½ and 1 lb. containers.

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(Continued from Page 672)

• Groups of subscribers have been enrolled in thirty-eight of the fifty-five county medical society areas. Each group of subscribers enrolled requires at least five months before preëxisting conditions are corrected. *During this period, two to three times more services are received by subscribers than by persons in the general public.*

* * *

• Remuneration for services under Michigan Medical Service is particularly advantageous in situations such as the following:

Accident cases where no payment for services would be available.

Where services have been rendered for years with no possibility of collecting any charge.

For services rendered to patients who move out of the state.

Patients who die and leave no estate.

Patients who would ordinarily receive care as medical indigents.

### Late Reporting

• To overcome late reporting of services, it has been provided that reports must be received within ninety days from the month of service to be eligible for payment.

* * *

• For the months of April, May, and June, benefits have been prorated or tentatively reduced 20 per cent until a final determination can be made of the total volume of services for these months.

* * *

• It is absolutely essential that the Initial Service Report be sent by the doctor to Michigan Medical Service when the subscriber first requests services for each illness. This report enables prompt verification and the sending of a notice to the doctor if the subscriber is not eligible for benefits. Likewise, the Initial Service Report permits the setting up of records and speedier payment on Monthly Service Reports.

* * *

• Monthly Service Reports should be sent not later than the tenth of the following month for services rendered each month.

Remember—reports received later than ninety days from the month of services can not be authorized for payment.

### Coöperation of Doctors

• The number of doctors registered with Michigan Medical Service has increased each month until now over 3,600 doctors are participating. The distribution of participating doctors according to county location and type of practice compares very closely with the distribution of doctors in Michigan.

---

### UNIVERSITY OF MICHIGAN MEDICAL SCHOOL REUNION

The second triennial reunion for alumni of the University of Michigan Medical School and former Staff members and house officers of the University Hospital will be held in Ann Arbor on October 2, 3 and 4. Faculty members who will participate in the scientific program are Drs. John Alexander, Carl E. Badgley, Frederick A. Coller, Howard B. Lewis, Charles F. McKhann, Norman F. Miller, Louis H. Newburgh, Malcolm H. Soule, Cyrus C. Sturgis, Carl V. Weller, and Udo J. Wile. Alumni speakers and their topics are as follows: Dr. William L. Benedict, Professor of Ophthalmology at the University of Minnesota Graduate School of Medicine and Ophthalmologist at the Mayo Clinic: Diagnosis and Treatment of Glaucoma; Dr. Detlev W. Bronk, Professor of Biophysics and Director of the Johnson Research Foundation, University of Pennsylvania School of Medicine: Physiological Frontiers in the Medical and Social Sciences; Dr. Charles L. Brown, Professor of Medicine, Temple University School of Medicine: Clinical Aspects of Osteoporosis; Dr. George W. Curtis, Professor of Surgery, Ohio State University College of Medicine: The Determination of the Circulating Thyroid Hormone; Dr. Joseph R. Darnell, Lieutenant Colonel, Medical Corps, United States Army, Office of the Surgeon General: Concerning Army Medical Service; Dr. Harold K. Faber, Professor of Pediatrics, Stanford University School of Medicine; Portals of Entry in Poliomyelitis; Dr. Tinsley R. Harrison, Professor of Medicine, Bowman Gray School of Medicine of Wake Forest College: Spontaneous Hypoglycemia as a Factor in the Production of Cardiovascular Symptoms; Dr. Lyle B. Kingery, Professor of Dermatology and Syphilology, University of Oregon Medical School: The Significance of Pruritus in General Medicine; Dr. Perrin H. Long, Professor of Preventive Medicine, Johns Hopkins University School of Medicine: Recent Aspects of Bacterial Chemotherapy; Dr. Robert T. Monroe, Peter Bent Brigham Hospital, Boston: Old Age; Dr. Walter M. Simpson, Pathologist, Miami Valley Hospital, Dayton, Ohio: New Developments in the Diagnosis and Treatment of Brucellosis; Dr. Warren T. Vaughan, Richmond, Virginia: The Allergic Factor in Certain Dermatoses.

———MSMS———

**There will be 110 technical and scientific exhibits at the Annual Meeting of the Michigan State Medical Society at Grand Rapids, September 17, 18, and 19.**

———MSMS———

**The Sections are making a special endeavor this year to present most entertaining and practical presentations at the Annual Meeting of the Michigan State Medical Society, September 17, 18, and 19 at Grand Rapids.**

# KARO FORMULAS FOR PREMATURE AND DEBILITATED INFANTS

**DILUTE MIXTURES**

Evaporated milk..... 4 ozs.
Water, boiled.....12 ozs.
Karo..... 1 tbs.
2 ozs. every 3 hrs. for 8 feedings

Lactic Acid milk (dried) 5 tbs.
Water, boiled.....16 ozs.
Karo.....1½ tbs.
2 ozs. every 3 hrs. for 8 feedings

**CONCENTRATED MIXTURES**

Breast milk.....12 ozs.
Evaporated milk..... 4 ozs.
Karo..... 1 tbs.
2 ozs. every 3 hrs. for 8 feedings

Lactic Acid milk (2%)..16 ozs.
Karo..... 2 tbs.
2 ozs. every 3 hrs. for 8 feedings

**FEEDING PROGRESS**

| Days of Age | Drams at Each Feeding | Ounces of Feeding per 24 Hrs. |
|---|---|---|
| 1 | 1 | 1 |
| 2 | 2 | 2 |
| 3 | 4 | 4 |
| 4 | 6 | 6 |
| 5 | 8 | 8 |
| 6 | 10 | 10 |
| 7 | 12 | 12 |

(8 drams = 1 ounce)

*Prematures usually thrive on Karo formulas*

"MOST of the common milk mixtures have been used at various times with some degree of success —evaporated, acid and dried milks, and butter-flour mixtures. Those high in protein and carbohydrate and low in fat are the most suitable in concentrated formulas properly adapted to the limited digestive capacity of the premature. While lactic-acid milk with addition of 7 to 10 per cent by volume of Karo syrup yields twenty-five to thirty calories per ounce, evaporated milk with 5 to 10 per cent added Karo syrup is equally effective.

Processed or acid milks are advantageous because of the fine curds produced, the premature being particularly susceptible to curd indigestion. Nonfermentable carbohydrate in quantities similar to those used in normal feeding of infants may be added to any of these milks. The formula may be concentrated by decreasing the water, or adding powdered protein milk in place of extra amounts of sugar."

KUGELMASS: "*Newer Nutrition in Pediatric Practice.*"

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# HALF A CENTURY AGO

## GALL STONES—A NEWER PLAN OF TREATMENT*

J. R. Williams, M.D.

White Pigeon, Michigan

The subject to which I invite your attention is that of gall stones. I shall not attempt an exhaustive article upon this very important, and to me, deeply interesting subject, but simply touch upon such features in the diagnosis and treatment as are of practical importance in the daily work of the busy practictioner, and present a plan of treatment superior, I think, in every way to the treatment usually prescribed. The symptoms of this painful disease are: first, an uneasy sensation, nausea, and pain located in the right hypochondriac and lower part of the epigastric region; persistent vomiting. The vomited matter that at first consisted of the partially digested food, soon changes to a glazy mucus, and often there may appear bilious matter, the contents of the gall bladder liberated by the passage of the stone into the duodenum.

There is usually constipation and the abdomen is frequently distended by gas, which makes its escape when a movement of the bowels takes place. Jaundice is present in the majority of cases and its extent depends upon the degree of obstruction, though there may be no jaundice—as when the obstruction is in the cystic duct—and when all the symptoms of gall stones are present except that of jaundice, which afterward appears, it is evident that the stone has changed its position from the cystic to the common bile duct. Many cases are recorded in which the stone, after its escape from the bile ducts, finds lodgment in the bowels. Of course this can occur only when the stone is very large. The only disorder, with which an attack of hepatic colic may be confounded, is gastralgia. But here the distinction is made by the seat of pain, by the absence of jaundice, and the failure to find concretions in the stools.

And here let me call your attention to the fact that in all cases presenting symptoms of bilious colic, the stools should be examined. A white cloth should be laid on the ground, the stool emptied upon it, and washed with water. I well remember a case presenting all the symptoms of gall stones to which I was called. The patient informed me that the present was not her first attack, but when I diagnosed the case to be gall stones, she stoutly maintained that such could not be the case, as in this as well as former attacks the pain was induced by eating mutton. I informed her of the nature of her disease, prescribed appropriate remedies, and the result was the finding of a large number of gall stones in the stool, greatly to my satisfaction and the relief of my patient. And now, satisfied of the symptoms, what treatment shall we prescribe? Gall stones, as we are all aware, are composed largely of cholesterin, but in normal bile cholesterin is an ingredient of small percentage. Therefore, before gall stones can be formed, the bile must become greatly changed. Its physical conditions are of less importance than its chemical. There must be an accumulation of bile in the gall bladder—stasis—and concentration. These conditions are essential to calculus formation. Now, what brings about this change in the bile? I am satisfied that this disease has its origin in a duodenal catarrh, swelling and pressure upon the duct so closing the duct that the contents of the gall bladder cannot find exit. The bile becomes concentrated and stones are formed. Now, what treatment shall we prescribe? The old treatment consisted of four rules: (1) Open the bowels. (2) Relieve the pain. (3) Prevent inflammation. (4) Prevent future attacks. Until recently the treatment consisted wholly of antispasmodic antacids and cathartics, and frequent calls to attend the same patient were the result. Finally, olive oil was introduced to the profession as nearly a specific, and certainly many wonderful cures followed its use, the modus operandi of which no one has discovered. Yet even olive oil sometimes fails. The treatment I propose has certainly proved to be, at least in my hands, an improvement on all former treatment. I cannot say that it will be successful in all cases, but so far as it has been tried, it was a success. When called upon to visit a patient suffering with bilious colic where gall stones are suspected, I first give morphine by hypodermic injection, until I have the pain under control. As soon as my patient is easy, I give Bower's or other refined glycerine in doses of one ounce every two hours until free movement of the bowels takes place. The result of the internal administration of glycerine is a copious evacuation, the stools frequently containing gall stones and inspissated bile. I am satisfied that the use of glycerine in these cases, acts in the same manner as when given per rectum or vagina, and who, that have used glycerine in this way, have not been surprised at the amount of watery flow that takes place? I believe that glycerine depletes the duodenal mucus and thus liberates the duct that is pressed upon.

I believe that in glycerine we have a remedy for this disease, sure and painless. There are other reasons that might be given why this remedy acts as it does, but to me none look so reasonable as the one I have given.

I thank you, gentlemen, for the time I have taken. I sincerely hope that you will give this subject your consideration—the consideration it deserves.

*Presented at the twenty-sixth annual meeting of the Michigan State Medical Society held at Saginaw, June, 1891.

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A powdered, modified milk product especially prepared for infant feeding, made from tuberculin tested cow's milk (casein modified) from which part of the butter fat is removed and to which has been added lactose, vegetable oils and cod liver oil concentrate.

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- ☐ Walker - Elmer - Rose—**"Physical Diagnosis,"** price ..... **8.75**
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- ☐ Titus—**"Obstetric Difficulties,"** price.... **10.00**
- ☐ Sutton and Sutton—**"Introduction to Dermatology,"** price ..... **9.00**
- ☐ Ritchie—**"Essentials of General Surgery,"** price ..... **10.00**
- ☐ Crossen—**"Diseases of Women,"** new edition, price ..... **10.00**
- ☐ Marriott—**"Infant Nutrition,"** new edition, price ..... **5.00**
- ☐ Blair—**"Cancer of the Face,"** price... **10.00**
- ☐ Clark—**"Positioning in Radiography,"** price ..... **28.00**
- ☐ Herrmann—**"Heart,"** price ..... **5.00**
- ☐ Willins—**"Mayo-Cardiac Clinics,"** price **5.00**
- ☐ Porter-Carter—**"Pediatrics,"** new edition, price ..... **10.00**

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## A SHORT SKETCH OF HENEAGE GIBBES

### By an old Friend

After reading a reprint of a paper on tuberculosis that appeared in THE JOURNAL, I was reminded of several incidents of my meetings with this really remarkable man, Heneage Gibbes.

His life, mannerisms, training and teaching presented a mixture of London Cockney and Aberdeen stubbornness which we of Aberdonian blood can swear is an awful combination.

Doctor Gibbes was born in Somerset, England, the son of a minister and grandson of a noted physician who had been physician to Queen Charlotte.

Mr. Gibbes decided that his son should study for the ministry but the young man rebelled and at fourteen set sail on a vessel bound for the East Indies. He was captain of the ship at the age of twenty-one.

His stories of his early life were interesting to me and intriguing. His ship was involved in the Opium War between the British and Orientals. Very valuable cargoes of the pearl fishermen had to be protected on his ship from many pirates. Shipwrecks were not uncommon and on one occasion Captain Gibbes was stranded along the Chinese coast on a pirate island but managed to escape. Once he decided to fight it out with a pirate ship. The Captain was fond of hunting and a good shot so he had his Coolie sailors reload the two guns and took particular pains to get the wheelman of the pirate ship—and the wheelman was a very necessary adjunct to any ship.

He finally returned home, finished his preliminary studies from private tutors, and in 1879 he received his M.B. and C.M. from the University of Aberdeen. Shortly afterwards he received his F.R.C.P. in London.

Doctor Gibbes became Curator of the Anatomical Museum of King's College and also served on hospital staffs. He had been a student of Dr. Klein, and being well qualified as a histologist, Dr. Klein and he were sent to the British Government to make a study of Asiatic Cholera in 1884.

I had the fortune to take a special course in Pathology from him and he was a fine teacher. Pathology was a comparatively new subject and here was a man who claimed much for it. To test him out some wags from Ann Arbor and Detroit concocted a scheme and sent him a tissue specimen from a pig's tail requesting a report. Lo and Behold! in a few days the unexpected report came to hand with the notation, "It is animal tissue, and not pathological, and it is from an extremity." Did he know his pathology, and how he did his "tail" unfold.

For a number of years Dr. Ernest L. Shurly and Dr. Gibbes made exhaustive studies of tuberculosis as the older journals of the state medical society will show.

At one time Dr. Gibbes wrote several articles for a Chicago medical journal but I am unable to trace the name of the journal. One of the papers on drowning told how it feels to go down for a third time as he had on two occasions.

Shortly before the death of Doctor Gibbes, I spent a very pleasant afternoon with him in his home at McAllister, Oklahoma, and it was only then I learned that beneath a Scottish-Cockney exterior was a charming character, subdued, cultured, sympathetic, companionable and inspiring. I looked forward to other visits with the Doctor, but a short time after my first visit the Doctor passed away.

He died in July, 1912.

If you want a really manly man
Try an honest, cultured, rugged man
With a heart of gold beneath his ribs.
For such a man was Heneage Gibbes.

WEELUM

WILLIAM FOWLER, M.D., F.A.C.S.

The JOURNAL
of the Michigan State Medical Society
Issued Monthly Under the Direction of the Council
Volume 40 September, 1941 Number 9

# Planned Parenthood

## Its Contribution to National Preparedness*

By Richard N. Pierson, M.D.
New York City

Richard N. Pierson, M.D.

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■ At a time when world revolution and world domination by dictatorship threatens, the American nation may well be concerned with its resources for defense—material and human. But thus far the principal emphasis has been put upon guns, tanks, aircraft and battleships. Now leaders throughout the nation are beginning to give thought to our human resources.

"A falling birth rate . . .," "Race suicide . . .," "A nation of old people." Phrases, such as these, appearing in news columns, editorials and magazine articles are attracting wide public attention and arousing public fear.

**The people of this nation may well ask themselves: Are we committing race suicide? Are we strong enough in numbers and in quality to defend our democratic institutions?**

Much has already been undertaken through the efforts of the Federal government, to safeguard the national health, to provide security for old age and for the unemployed, to expand facilities for public education of children and of adults, to conserve natural resources and to provide adequate housing for low-income group families. In this hour of danger, all these things which give meaning to the word *democracy* must be coordinated into one great national effort to mobilize this nation's human resources.

### The Nation's Manpower

In the face of the death struggle in Europe and in Asia between democracies and totalitarian powers, the American people want to know:

What is the state of the nation's manpower?

How will our national strength be affected by trends in the birth rate?

The population of North America even discounting the heavy tide of immigration, has increased in 150 years at the most phenomenal rate recorded in world history. Between 1790 and 1815, the population doubled. It doubled again between 1815 and 1840; a third time from 1840 to 1865; again a fourth time from 1865 to 1900. If this rate had continued, the United States would have more than 150,000,000 people today, instead of 131,000,000, and by the end of the century, "Our population would have greatly outnumbered the Chinese."[2]

Fortunately for the orderly growth of the nation this extraordinary rate did not continue. Rapid industrialization and urbanization of the people, coupled with the economic depression, has resulted in a marked slowing down of the rate of increase, saving us from the disastrous consequences that have accompanied unlimited reproduction in other countries—notably China and India.

Population authorities have built up most careful estimates of our future population growth.

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A conservative estimate by two outstanding authorities (Mr. P. K. Whelpton and Mr. Warren S. Thompson, co-authors of "Population Trends in the United States") forecasts an increase of nearly 23,000,000 by 1985, when the total population of the nation is expected to reach its maximum of 154,000,000. And their estimate includes calculations which anticipate a further decline in the birth rate of nearly 25 per cent.

As far as available manpower is concerned the United States today has approximately 24 million men between the ages of twenty and forty-five, usually considered the military age group. (Draft age, twenty-one to thirty-five). This is four million more than we had during the World War. And by 1980 it is estimated the United States will have 26,380,000 men in this age group.[4]

Thus, America's population is increasing and will continue to increase, according to most reliable estimates, for the next thirty to fifty years. At that time it will reach a maximum peak and will either remain stationary or decline slowly. This trend is reflected in the experiences of virtually every other civilized nation.

The nation's manpower, both in effective military age groups and in productive workers, is adequate for national defense in point of numbers. Thus, it is clear that the cry "race suicide" with which some have greeted our declining rate of growth is unjustified by the facts. The rate is declining. Our numbers continue to increase.

### Wasted Resources

The White House Conference on Children in a Democracy reported in 1940 that between six and eight million children were in families dependent for food and shelter on various forms of economic aid. Coupled with that is the fact that approximately fifty per cent of the 2,000,000 children born in the country each year are born to families on relief or with incomes of less than $1,000 per year.

Can there be any question that this unbalanced rate of birth is vastly complicating the social, health and economic problems of the nation; and seriously impeding the growth of a sturdy, self-reliant people, ready and willing to face the extreme emergency of national defense?

In a recent publication, "Our National Resources," the National Resources Planning Board, Washington, D. C., July 29, 1940, reported:

> "Preventive health services for the nation as a whole are insufficient. Hospital and other institutional facilities are inadequate in many communities, especially in rural areas, and financial support for hospital care and professional services in hospitals is not enough, particularly for people of the lower income brackets."

It continued:

> "A third of the population, those with incomes under $750 per year, is receiving inadequate or no medical service. An even larger section of the population suffers from economic burdens created by illness."

This inadequacy of the nation's health resources has a staggering effect on the future quality of the population. Here are the shocking facts as disclosed at the White House Conference:

Among America's children today:

Six million are improperly nourished.
A million have weak or damaged hearts.
Three millions have impaired hearing.
A million have defective speech.
850,000 are definitely feeble-minded.
300,000 are crippled.
400,000 are tuberculous.
50,000 are partially blind.

This would indicate that we are breeding many of our children today under conditions which predispose to a life of ill-health, permanent disability, poverty and delinquency. Draft experiences in the Great War showed a disquieting percentage of young men physically unfit for military service. Physical requirements for the 1940 draft have been lowered.

In study after study, sociologists and authorities in the field of crime and delinquency have shown a correlation between large, underprivileged families and the incidence of crime.

**The crime problem today in America is a youth problem. As J. Edgar Hoover, director of the Federal Bureau of Investigation, said recently, "It is not pleasant to face the fact that 12 per cent of all murderers, 45 per cent of all burglars, 32 per cent of all thieves, 13 per cent of all arsonists, and 52 per cent of all automobile thieves arrested are below voting age." The cost of crime is estimated at fifteen billion dollars a year.**

**In other ways the nation is paying a high price for its unbalanced birth rate and for lack of a positive democratic population policy.**

We are estimated to be spending five billion dollars a year for the relief of dependent individuals and families; for the maintenance of institutions for the insane and the feeble-minded; for the care of the aged, the crippled and the blind.

The cost of ill-health and premature death is estimated at ten billions; the cost of *social inadequacy,* at five billion dollars a year. The total, allowing for possible over-lapping, is said to come to *one-fourth of the national income.*

But more serious to the future prosperity and well-being of the nation than this huge annual toll of economic loss, is the wastage in human resources upon which the nation must depend for its future citizens and its future leaders.

American families, many millions of them, because of ignorance year after year breed more children than they can care for—more children whose only expectation for the future is to perpetuate the conditions of poverty and ill-health under which their parents live.

The consequence must be of concern to every citizen who has any deep interest in the present welfare and defense of the nation.

### Prosperity and Population Trends

It has been the custom for many business men and economists to view with alarm the falling birth rate in the United States, on the basis of the belief that rapid increases in population go hand in hand with rapidly expanding economic growth. In a bulletin on population trends published by Standard Statistics Company it was stated:

"If the addition of workers to a new country helps to raise the per capita income through better exploitation of natural resources, while overcrowding results in poverty and starvation, there obviously must be an optimum number of people somewhere between the two extremes. As the population increases, the average amount of natural resources per individual falls. It certainly would be economically unwise to increase the labor supply past the point where productivity per worker reaches a maximum."

Whelpton stated recently:

"If this nation could choose between having a stationary population of 131,000,000 (our present size) or 150,000,000 or 100,000,000 it can be shown quite conclusively that the smaller number would be best from an economic standpoint."[6]

As the Standard Statistics Study has pointed out, the root of the economic problem arising from population trends is the relationship between numbers of people and land and natural resources. The latter are definitely limited; there is no readily definable limit to size to which a population may grow under favorable conditions. And as Professor Henry Pratt Fairchild has pointed out: ". . . without new land and augmented natural resources, technology alone cannot provide for an indefinite increase of population."[1]

"A concrete illustration of the possibilities is furnished by the record of two brothers, who married two sisters in Lille, France, in 1830. One hundred and three years later these two couples had 835 living descendants."[1]

The effect of population trends upon the reservoir of productive workers is well-marked. In 1930, 55.5 per cent of the population was in the productive age group of from twenty to sixty-five years of age; this percentage, according to conservative estimates, should increase to 61 per cent by 1950. By 1980 the percentage will be approximately 60 per cent of the total population.[3] In consequence it is readily apparent that the economic structure of the United States will not lack for productive man-power as a result of decreasing population growth.

In 1935-1936 the average annual income of the American family amounted to $1,622; one-third of the American families received an annual income of less than $780, the middle third received from $780 to $1,450, and the highest third received $1,450 or more.

E. J. Coll, Director of the National Economic and Social Planning Association, has strikingly characterized this problem:

"In the depressed areas of the country are perhaps 40,000,000 people living at, and below, a subsistence level, and taking a very meager part in the economic life of the nation. If these people could be brought into effective production and consumption, total economic activity of the nation would be vastly expanded without any actual increase in numbers of people."

### America's Population Problem

It has been the purpose of my observations thus far to develop the facts as we know them concerning population trends in this country and the possible effects of those trends upon the nation's social and economic life. It seems clear that America's population problem today is not one of numbers, but a problem of qualitative growth.

### Quality vs. Quantity

In numbers the American nation is strong and will grow stronger. In health and in morale there is reason to ask the question: Is the quality of our people in real balance with quantity? Ten years of harsh economic circumstance for a large section of the American people have left a residue of social, economic and health problems which menance seriously the quality of our human resources, the endurance of democratic government, and therefore our military defences.

Today America's population is being bred from the bottom up. The poorest families, through ignorance, have more children than they can afford to rear properly. Families in the middle and upper income groups, particularly those in urban centers, are not having sufficient children to replace themselves, because of economic and social conditions which make the bearing of children destructive to the family's hard-won standards of living.

**This is unbalance.**

### A Democratic Population Policy

State subsidies, bachelor taxes, medals for prolific mothers—these the totalitarian states have tried in their drive to breed more and more cannon fodder. In large degree they have failed. Sweden is the one country which appears to have succeeded: They plan parenthood and subsidize it.

It is an inescapable fact that where conditions are favorable to early marriage, where the economic burden of parenthood may be undertaken more easily, and where more hope exists for a better world tomorrow for today's children, the people of any nation will bear children and increase or maintain their numbers. Doctors know that American women continue to want children.

If the United States is to correct its unbalanced birth rate; if it is to encourage parents in the middle and higher income classes to bear more children; if it is to maintain its population well balanced in quantity and quality, it must seek to create these conditions.

* * *

## SWEDEN'S POPULATION POLICY

By Alva Myrdal, *Birth Control Review*, April, 1939

After stock had been taken of demographic changes and their causes and also of social conditions, a population program was formulated, with concrete plans drafted in seventeen reports by the Population Commission and some ten reports by other related Royal Commissions. The first proposed reforms were enacted in 1935, most of the new legal provisions went into effect January 1, 1938, and some are still only plans, though thoroughly prepared and officially recommended. The basic principles of this population policy may be summarized in three statements, all of which are apparent paradoxes:

1. Voluntary parenthood and a positive population policy shall be brought together. The neo-Malthusians focused their interest on the former, while population conservatives have centered around the latter. There is, however, no reason for such a choice. Voluntary parenthood should be assured, so that the size of individual families may be regulated according to their best interest, but community means should be mobilized so as not to force that regulation to extremes. Only children welcome to their parents are wanted by the nation. Birth control must be spread effectively to all groups of society, in order that only desired children are born, but at the same time social conditions must be so rearranged that more children can be welcomed.

2. Both quantitative and qualitative aspects are considered. The quantitative goal has been fixed at retaining, if possible, a constant population; increasing population numbers being considered neither feasible nor desirable. This quota should not, however, be filled by children undesired by their parents; quantity should not be secured by sacrificing quality. Thus Sweden cannot resort to paying premiums to parents per newborn child, however effective such measures may be from the purely quantitative interest. All measures should be shaped so as to insure both the best improvement in health and environmental conditions for the children themselves and a reduction of the economic motive for extreme family regulation. It follows that practical aid, instead of being paid in cash to parents, should be paid in services to children, offering rational coöperative consumption, tax-paid for children of all social groups.

3. The means for a democratic population policy must include both educational influences and social re-

forms. Sheer moralization and exhortations of duty to the nation are considered futile. Psychological attitudes may, however, be changed by education to greater understanding of family values and greater capacity for living in family relations. On the other hand, economic reforms are necessary by which a larger share of the national resources are allotted to children.

Without education, no family reforms can be voted by a people among whom childless individuals and "child poor" families already form the overwhelming majority. Without social reforms no sermons on the value of larger families can be given to the broad masses of the people. When the "normal" size of the family in the majority of non-sterile marriages has to be fixed at four children in order to keep population constant in the long run, it becomes apparent that nine-tenths of the population cannot rear these children according to approved standards of health and culture without considerable community support.

All the positive reforms aim at improving health, education and environmental conditions in general. Together they form a new system of prophylactic social policy, safeguarding the quality of the population in advance and not merely palliating its ills. Such a policy is considered an investment in the personal capital of the country, equally as profitable or more so than investment in factories and machines and other property which "rust can corrupt and moth consume."

Basic to any population program founded on democratic ideals and ways of living is the proposition that *parenthood must be voluntary.* It is part and parcel of the democratic ideal, expressing as it does the right of a child to be well-born and well-reared; the right of the parents to undertake the responsibilities of parenthood consciously and in full knowledge of their duty to themselves, to the child and to the nation. Maintenance of a nation's birth rate by *undesired* births not only violates the spirit of democratic society, but creates social and economic problems which menace the orderly growth of democratic institutions, and may lead to the destruction of democratic government.

To maintain a democratic society, population replacement would surely better come from thoughtful and responsible parents, rather than improvident irresponsibles. It will be generally agreed that planned parenthood has an essential place in a comprehensive population program.

As a weapon in the armamentarium of physicians and public health officers, planned parenthood reduces maternal and infant mortality and helps to promote the general health of the community. Specifically it will greatly reduce maternal mortality by preventing pregnancy in poor maternity risks (cardio-vascular, chronic kidney, et centera) and in women who would otherwise resort to induced abortions.[5]

As a means of promoting marital happiness, planned parenthood strengthens the family and promotes the vitality of family life upon which rests the welfare of the nation as a whole.

In consequence, one of the major tasks of a sound population program is the rapid extension of planned parenthood to all families in the United States who desire it. This would require not only contraceptive advice available from and prescribed by physicians, but also the inclusion of contraceptive advice in state and federal public health services—a step approved now by seventy-seven per cent of the American people, according to a recent Gallup Poll. Already three states have incorporated birth control into their state maternal and child health programs, as a very important health service, which now offer exceptional opportunity for study of the benefits that result from the extension of contraceptive facilities to the poorer sections of the population.

The prevention by sterilization of breeding of the feeble-minded, the criminal insane, and the congenitally diseased is a specialized problem in which progress is being made. Many conservative authorities feel that it is full of unexplored dangers. Most doctors feel that it has a place which remains to be worked out.

Present activities of the federal, state, and local governments in the fields of health and social welfare, if administered with due recognition of the need for promoting planned parenthood, can contribute immeasurably to sound population growth and to the improvement of the quality of the nation's people. General education on maternal and child welfare, with proper emphasis on child-spacing and public health services for those who cannot afford the services of private physicians, would reduce the economic burden of having and caring for children and promote a more intelligent and conscientious attitude toward parenthood.

Corollary to these activities and of equal importance to a national population program is the need for regional and national planning and study of the relationship of resources and population in various geographic areas. In recent years, many states and a number of regional

planning commissions have been created for that purpose. Aided by such national bodies as the National Planning Board, these at present constitute one means of attacking the complex problems of migration, wastage of resources and other problems of regional development which bear directly upon the whole national problem of population.

### An Initial Step

Full development of a comprehensive population program in accordance with the American way of doing things is a complex and long-time task. Like many another movement devoted to the national welfare, no ready answer or quick solution is possible. But the issue is far too important to be dismissed as too complex to admit of practical accomplishment. A start must be made.

### A Task for All

America's population problem is not alone the concern of students and authorities in the field. It is the vital and immediate concern of every citizen of the nation. Practical action upon it requires the backing of informed public opinion.

Many of the activities now going forward which bear upon our population problem have the support of a majority of Americans. But on the whole problem of population there is little public understanding of the issues or the possible avenues of attack. One thing is certain: if public misunderstanding and lack of knowledge is permitted to continue, fostered by cries of "race suicide" and a "falling birth rate," public demand may force ill-considered and ineffective remedies in the near future, as it has done in the past. Particularly, effort should be made to resolve the relatively small remaining controversy between the Catholic clergy and the majority of the American people on the subject of the method of birth control.

### Summary

Most Americans believe that the industrial end of national defense can be well handled by our industrialists in coöperation with the government. Planning and controlling parenthood is an essential democratic method of developing and maintaining the optimum quality and quantity of our people. In this planning, we doctors, we citizens, are confronting a problem of fundamental importance to us, and to our children and to our country, because it determines the man-power needed for national defense.

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# Primary Carcinoma of the Scrotum

## Report of a Case

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PRIMARY CARCINOMA of the scrotum is a rare neoplasm in the United States. The cases reported in this country have occurred chiefly in New England. According to the literature reviewed, no cases have been described as originating in Michigan, and it is for this reason that the following case report is of interest.

W. W., a white man, aged 59, presented himself for treatment in July, 1939. He was born in an adjacent county, and had been employed as a fisherman on the Great Lakes for forty years. His past medical history contained no record of important illnesses. There were no references to cancer, tuberculosis, or other constitutional diseases in his family history. Some years ago, in his occupation, he followed the common practice of using tar as a preservative for fish nets. However, an entirely different substance was substituted about ten years ago. The patient did not recall that his clothing covering the external genitalia ever became contaminated with the tar, although he admitted the possibility. His complaint at the moment consisted of an ulcerated area on the scrotum. This was first noticed in November, 1938, appearing then as a small indurated area. In the 2 months immediately preceding his initial examination, it had grown quite rapidly, with an increase in localized tenderness. About 1 month before he was first seen, the involved area became ulcerated. His weight had remained constant.

The physical examination disclosed a tall slender

man whose appearance belied his age. His left pupil was slightly larger than the right, and did not react to light quite as vigorously as the right pupil. The disturbing lesion was located on the inferior portion of the left scrotum, measuring about 2 cm. by 1.5 cm. It was freely movable, and appeared to involve only the skin. The edges were quite firm and somewhat rolled. Ulceration of the growth had resulted in a purulent coating, moderate in amount. The scrotal contents were normal upon palpation. Both inguinal areas contained small palpable lymph nodes. The prostate was of normal size on rectal examination.

The blood count and hemoglobin estimation were within normal limits. The blood urea level was 33 mg. per cent, and the Kahn test was negative.

*Clinical Diagnosis.*—Carcinoma of the scrotum, with probable metastases.

Under spinal anesthesia, the scrotal lesion was widely incised. Ample scrotal tissue was available for closure without tension. Through bilateral inguinal incisions, the superficial and deep lymph nodes were dissected and removed.

The scrotal incision healed promptly. From the inguinal wounds, there was a moderate amount of serous drainage which persisted for ten days before healing was complete.

*Pathological report (Dr. C. M. Owen).*—Microscopically, the scrotal tissue exhibited a new growth of atypical squamous cells, which showed from 25 to 50 per cent undifferentiation. Some keratin was present with the formation of small pearls. A number of mitotic figures and large nucleoli were seen. Considerable secondary infection was also evident. The lymph nodes showed infection, but no metastases.

*Diagnosis.*—Squamous cell carcinoma of the skin, grade ii, with an associated infection. Lymphadenitis.

### Progress

*January 16, 1940.*—Patient states that he has been working regularly, and is feeling well.

*September 4, 1940.*—A more recent communication from the patient states that he was seen by his doctor, and the groin and scrotal wounds were found to be free from palpable masses. The patient is continuing at his work.

Most of the reported cases in the world literature of carcinoma of the scrotum have occurred in the British Isles, where it was noted by Butlin over 45 years ago as a comparatively common occupational epithelioma. According to Green, it was first described by Percival Pott in 1775, and called "chimney-sweep's disease." The number of fatal cases of cancer of the scrotum reported by Henry to have occurred in England and Wales between 1911 and 1935 was 1,487. A large number of these were in individuals employed in the cotton-spinning industry. Others were tar and petroleum workers, and those engaged in the Scottish shale oil industry. The rarity of this lesion on the Continent in comparison to the numbers seen in English hospitals was

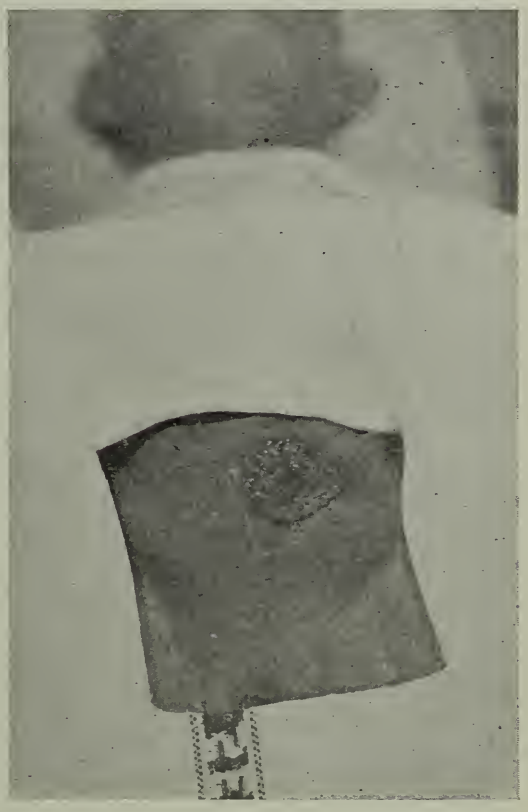

Fig. 1.

noted by Butlin many years ago. The subject was reviewed in this country by Green in 1910, who found only seven cases in the records of the Massachusetts General Hospital in the 25 years preceding 1910. Only four of these were unquestionably primary carcinoma of the scrotum; one was secondary to cancer of the penis, and two were probably cancer of the scrotum, but were not verified microscopically. Green also stated that three of the four proven cases had the lesion on the left side of the scrotum; two of the patients had been "mule-spinners" in the cotton mills of England; the other two were from Ireland, occupations irrelevant. Recently, Graves reported a series of fourteen cases, of which number, nine gave a definite history of exposure to oil; of these, three were employed as "mule-spinners." Metastases were found in the inguinal glands of ten of the fourteen cases. The malignancies were grade i in six cases, grade ii in

four cases, and grade iii in two cases, two cases being unreported.

Experimental and clinical observations indicate that the mineral oil used in the cotton-spinning industry is carcinogenic, according to Irvine. Leitch has demonstrated experimentally that certain refined mineral oils used for machine lubrication are capable of producing carcinoma of the skin. Of the cases reported in the British literature, a large number involve individuals in direct contact with mineral oil. Mule-spinners work astride a revolving shaft which throws oil onto the clothing, particularly that covering the external genitalia. The rotation of the shaft probably accounts for the predominance of the lesions on the left side of the scrotum in these workers.

In the case here reported no co-existing factors were apparent in the history to account for the malignancy on the basis of the usual history given in these cases. This patient had never been out of the state, and stated that he had had practically no contact with mineral oils.

### Summary

A case of primary carcinoma of the scrotum in a native-born American is reported, with no traceable etiological factors, except for the possible factor of tar, as formerly used in his occupation.

A brief review of the available literature on primary carcinoma of the scrotum is given.

But few cases have been reported in the American literature. Practically all the cases reported have occurred in the British Isles, chiefly among the cotton-mill workers.

Lubricating oil with carcinogenic properties is believed to be responsible for the incidence among these workers.

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### An Expressed or Implied Contract

There exists between the physician and his patient a relationship resting upon a contract which is either expressed or implied, and, in practically all cases, implied. This contract places upon the physician certain responsibilities and duties, and a breach of it leading to a bad result or injury to the patient may be the basis of an action for malpractice.

*Samuel Wright Donaldson, A.B., M.D., F.A.C.R. The Roentgenologist in Court. Charles C. Thomas, 1937.*

# The Highlights of Twenty-five Years of Service*

By Marjorie Euler

Topeka, Kansas

Marjorie Euler

I PROPOSE to discuss, very briefly and very crudely, a few angles that relate to the running of a doctor's office, with the hope that the discussion may be of some small help to other medical assistants. The organization of Medical Assistants is so new that, outside of a few articles in a business magazine, I was unable to find anything written concerning their duties, so I have only my own experience over a period of twenty-five years from which to draw.

The girl who works for a doctor today enters upon a real career and, it seems to me, one of the most useful careers that it is possible for her to fulfill. She is required to take medical dictation, write case and operative histories, keep accurate files, handle the doctor's correspondence, as well as to act as hostess, nurse, mother, entertainer, telephone operator, bookkeeper, collector, treasurer, income tax computer and housekeeper. It seems to me the best type of training to prepare oneself as a doctor's assistant, would be a general business course, including, of course, shorthand and typewriting and any sort of nurses' training you could get. I personally do not think it is necessary to be a graduate nurse, however, I do think this would help. You can pick up some of the laboratory work such as doing urinalyses and blood counts as you go along. This, of course, makes you more valuable to your doctor, but should contact with sickness and its attendant misfortunes be distasteful to you or make you worried or depressed, it

*Presented at the Conference of Medical Assistants at the seventy-fifth meeting of the Michigan State Medical Society, September 24, 1940.

would be much better for you to start your career in some business office, but on the other hand, if you have the urge to help and comfort, then you have found the groove to which you are best suited, and as the years go on and you get more acquainted with your work and grow to love it, you'll feel like you have been a little help to humanity and it will be a source of satisfaction to you.

By being in a doctor's office you miss one thing that you will find in a corporation, that is a chance for a higher position, for there is only one over you, the doctor, and his place you can never fill, but within your position itself there is the possibility of infinite expansion. You can continue to improve from day to day by doing splendid and worth-while work and by making yourself indispensable to your doctor. In other words be his left hand if you can't be his right, and be the best "Girl Friday" you can, and as you increase in helpfulness, and as his practice grows, and especially as you learn to handle his collections efficiently and actually save money for him, learn to do minor dressings and relieve him of giving shots, your salary will grow in proportion.

### Personalities

We might start now with a typical day at the office. Whatever time your office opens, be at least five minutes ahead of time, so that you do not have to feel rushed. Your time will always be well filled so a planned day will give you much more satisfaction and time, than one that is rushed and muddled. Nothing annoys a doctor more than not to have you at the office on time. It is very annoying to him to have a patient phone him at home or bother him at the hospital with this remark, "I called your office but nobody will answer." You will find just so many people of this kind so be on hand and do not let it occur. Yourself should be neat and well groomed at all times; uniform and shoes kept spotless and white, makeup—yes, we should be as attractive as possible as we are the first glimpse that the public gets of the office, but this doesn't mean brilliantly colored claws for nails. Have them well manicured (this can be done by giving a little of your time and with very little expense). I prefer a light or natural shade of polish for the office. I do not think there is anything more out of place in a doctor's office than gaudy nails and costume jewelry. Never be guilty of wearing a dark slip under a white uniform nor one that is too long.

### Office Housekeeping

Now we are at the office, in uniform and ready to start the day. We must dust first as everything around a doctor's office should be kept as spotless as soap, water and furniture polish can make it, magazines arranged neatly on magazine racks or tables, one at each end of the room if possible so that patients will not have to reach across another to get a magazine—as this is always annoying especially so, if you do not feel well. Do as much of the doctor's correspondence as possible before the doctor comes in, as it is much easier and you are less apt to make mistakes, if you run your typewriter when there are no interruptions, also it leaves you free to help your doctor when he does come in. Always have your sterilizer on and at a low boil, so that in general use or any type of emergency it is always ready to sterilize instruments without delay. At this time take plenty of time to check all supplies and see that they are ready for instant use. Post all books if possible before the doctor arrives, if you post them every day, you will find it takes only a short time; books kept up is a joy and satisfaction to yourself as well as your doctor. The morning is a good time to make and sterilize dressings, sterilize and powder gloves and check your laundry. In ordering supplies I have found it best to stick to one or two good reputable pharmaceutical houses. After they become acquainted with you they will give you much better service and if they do not have your product, they will gladly order it for you and then keep it stocked. A word might be said at this time about magazines in a doctor's office. Do by all means keep them up-to-date. The old saying, "If you want an old magazine, go to a doctor's office," I am sure is fast becoming only a saying and not a reality, so discard all old and torn copies. I think two of the so-called woman's magazines are nice, also a fashion magazine, as there is not a woman living, young or old, educated or uneducated, who is not interested in fashions. Then for those who have only a few minutes to wait, picture magazines; *Hygiea,* the health magazine, put out by the A.M.A., will always have a big following.

**Patients**

Before the patients start coming in I find it helps to have a list of your appointments on your desk as well as the doctor's. Look these over until you are quite familiar with them, as nothing pleases a patient more than being addressed by his own name as he enters. If he is a new patient be very careful about getting name (spelled correctly), address and telephone number. If married get husband's initials and his place of employment; if a minor child, get father's initials. Do not leave this job up to your doctor as he is often too busy or else he knows the patient well enough that he hesitates geting the rest of the information that is essential for you to keep good records. I cannot stress this point too strongly, as this is the keynote of efficient collecting.

Usher patients in as near appointments as possible, trying not to show any fuss or rush regardless of how many are waiting. I have found it helps to save fifteen minutes in the middle of the afternoon for the patient who persists in coming in without appointment or for the out-of-town patient that never seems to think that it is necessary to phone or write for an appointment. Theoretically, it is unfair to those who have appointments to "run in" one without an appointment, yet it sometimes saves an excellent case for your doctor. If your doctor tries to take patients by appointment, it is best for you to tactfully say to the one who doesn't have an appointment, "Doctor prefers to take his patients by appointment" and that you would appreciate their calling for one in the future so that you can save more time for them. Tell them, however, that your doctor will be glad to see them for a few minutes if they don't mind waiting or that you will be glad to make an appointment for them the next day so that they will not have to wait. If it is not an emergency case they will usually coöperate. If another doctor calls up for an appointment, this must be arranged without hesitation, but again you must be very tactful not to let the already waiting patient know that one is being slipped in ahead of him.

To the shy, frightened, embarrassed patient you can be of a great deal of help. A word of encouragement, said in a sympathetic voice while she is being prepared for the examination, will often help as well as win you a world of friends. Also a shy woman will often tell the office nurse a great deal of valuable information about herself that she seems too embarrassed to tell the doctor. This you can convey to him in a few words that will help him a great deal in his diagnosis of the case. In this way you can be a great deal of help to both patient and doctor.

A pleasant smile and ready welcome is a receptionist's best weapon in handling any patient. Learn to handle them she must, and each one differently. If your doctor is late getting in for his first appointment, even though you know he is lunching with his best crony, telling about the big one that got away or the best camera shot he ever got, above all things do not let your patient be aware of the fact that he is taking a few minutes to relax. My pet expression is, "Doctor has had an extra busy morning at the hospital," or "We have had an emergency and doctor is going to be a little late." I find if you ask your patients to help you out they will coöperate nicely.

The next in line to take up is the doctor's friend that calls. He should not be kept waiting if at all possible not to do so. He may want to discuss a case with your doctor or he may just want a friendly chat, but in either case he always has the lead over all patients. If he sees patients waiting and it is only a friendly chat, he will not stay long. If it is a case he wants to discuss, he will make it as brief as possible, as he is probably in as great a hurry as your doctor.

Then come the medical book publishers, instrument salesmen and detail men. Be especially nice to these men, as they are not ordinary salesmen. In fact if the doctor is not too rushed he wishes to see them, as he likes to hear about what is new on the market. If you can see by your appointments just about when your doctor will be at leisure, tell them; this gives them a chance to go call on another doctor in the building and come back when yours is not so busy. They will appreciate your telling them and gladly coöperate. In contrast to this we have the necktie and hosiery salesmen, real estate men and peddlers of all sorts; even though our buildings are marked, "No peddlers or soliciting allowed." These you should never let get to your doctor, his time is much too valuable to waste on them, nor

must you spend any time with them. I cannot imagine anything more unprofessional than allowing a salesman to spread his wares across your desk when you have a room full of patients. You can smile and be courteous, but at the same tell them that your time is not your own and that you cannot look at their wares during office hours.

### Office Ethics

"Office ethics" can be called the title of our next subject, or casual remarks passed in or out of the office about your own doctor, another doctor in the profession or about a patient, because you will be asked, and you must have your answer well thought out. For example, you are not free to talk miscellaneously about health and disease. You realize that you are not a diagnostician as most people think you are. You cannot talk because you know too much, and because you know you are restrained you must realize that beyond being considerate, courteous and efficient, you have no business discussing, even with a patient, his problem which the medical expert alone must solve. I heard Mr. S. A. Long give a talk before the Kansas Medical Assistants at Wichita this last spring, and I quote, "If I were a medical man and had in my employ a secretary from whom, or through whom, the public ever found out anything about the people who came to my office, or why they came or where they went—if I ever discovered one small instance of betrayal of that professional confidence, that secretary would be hunting a job and doing it so quickly that her heels would scarcely touch the sidewalk." Never be guilty of calling a patient over the phone in the hearing of waiting patients and make an appointment for any kind of treatment that would give the people within hearing distance of your voice any inkling of what the patient is being treated for. The simplest way to take care of this is to make all such phone calls in the morning before patients arrive or else call from an inner private telephone. Another thing, do not leave reports or history charts of patients lying around on either your desk or the doctor's desk so that anyone entering your office might see them. It would be quite embarrasing to all concerned to leave a 4 plus Wassermann report lying on the desk so that any passer-by might see it. In casual conversation, if you do talk about your doctor, give him a boost, say something about his skill and ability, or tell them of some of the charity work he does (never mentioning names) so that they will know what a competent man he is. You will be surprised how many cases you can throw his way. Then there is the question of advice about another doctor. If you cannot say anything good, "Silence is Golden," because a slam at one doctor is a slam at the whole medical profession. My stock phrase for this situation is, "my opinion isn't worth very much as I am not well acquainted with his work."

### Telephone

The most valuable quality you can have as a secretary is a good telephone voice, as you have to make it smile, show sympathy and attention, all in the tone of your voice. Ninety per cent of your patients call you on the telephone one time or another. Almost all first appointments are made over the phone. Does your voice, which should be low, yet distinct, tell the patient that you are her helper and that you will be glad to be of any service for her that you can? Many of your telephone calls will be from people who are scared, worried, ill or neurotic. A pleasant, understanding voice usually calms them down until you get the information necessary to help them.

In answering a doctor's telephone never say "hello" or give the telephone number, as most people forget the number as soon as it is given or dialed, so it means nothing to them. Answer by giving the doctor's name, such as, "Dr. Smith's office," with a raise in your voice as though you were asking a question, or that you are willing and waiting to help the person calling. If there are two doctors in the office, say each name distinctly, with a slight pause in between, such as, Dr. Smith's and Dr. Jones' office. Your telephone company has worked out a good many suggestions that, if studied, will be a great deal of help to most of us in answering the telephone. If your speech is not so clear and distinct as it should be, deep breathing exercises and counting while holding the breath tend to deepen and strengthen your voice.

Answer your telephone on the first ring if at all possible. To the person who is calling the doctor, each second is a minute, so if the phone

rings five times before it is answered, he feels that he has waited five minutes for the doctor to answer. On the other hand the telephone company will tell you to let the phone ring ten times when you are calling a number before you conclude that the person you are calling is not there. If you are busy when the phone rings, whether talking to a patient, writing a receipt, or doing any other small piece of work, stop immediately if possible. If you are busy with a patient, say "Excuse me please," and then answer your phone, with no show in your voice that you are hurried or busy. The telephone company advises that to make your voice carry most pleasantly and at the same time clearly, speak directly into the mouth piece with your lips not more than half an inch away. Do this in a quiet, unhurried manner; no loud talking or shouting is necessary.

The telephone company will also give you a list of rules for pronouncing numbers and letters. These do not exactly correspond with your dictionary, but so many names and numbers sound alike over the telephone that when they are pronounced in the way they advise they are more easily understood. I will give you a few of them, and if you wish any more I am sure your telephone company will gladly supply you with them for the asking. They will also give you a talk on telephone usage if you will ask for it.

*O*—pronounce as if it were spelled oh with a round and long O.
*One*—pronounce as if it were spelled wun, with a strong W and N.
*Two*—pronounce, too, with a strong T and a long OO sound.
*Three*—pronounce th-r-ee, with a slight roll of the R, and a long EE.
*Four*—pronounce as fo-wer, two syllables with a strong F, long O and a strong final R.
*Five*—pronounce fi-iv, with a long i and a strong V, and so on.

When you answer the telephone—Dr. Smith's office—you will invariably get the remark, "Is Doctor Smith in?" your reply should be either, "Yes, doctor is here," or "No, not at this time." If he is in and so he can talk, connect him immediately, after saying, "One moment, please." If he is busy and cannot talk, tell them so and that if they will leave their number you will have him call them in just a few minutes. Keep a scratch pad and pencil at each telephone and one in your pocket, so that you will have one available for this purpose—do not trust yourself to remember these messages, because if you get busy you will forget. If he is not in, ask their name and telephone number and tell them you will have the doctor call them as soon as possible. Again your voice plays a big part in getting the information that you want. Do not neglect these telephone calls. If when calling the doctor to tell him about them, you find he is in surgery or delivering a baby, try to find out how long he will be and then call back and tell them—your efforts will be appreciated. Handle all phone calls that you possibly can yourself, such as, making appointments, call about collecting, soliciting for office magazines etc. Your doctor will appreciate your handling these detail.

In closing a conversation on the telephone simply say "good-by," never give a vague "all-right" nor use the slang expression "O. K." Do not use the doctor's telephone for visiting with your own friends. A long conversation over the telephone might be the cause of a very sick patient, or an emergency case that would mean a good many dollars in your doctor's pocket, to go to another physician, or even mean the life of the patient. Ask your friends not to call during office hours, unless it is an emergency, then make that as short as possible. If you are making a call for your doctor, state in the beginning whose office is calling and briefly what you want, such as, "This is Dr. Smith's office, Dr. Smith would like to speak to Dr. Jones." Always when talking on a telephone, take complete command, refrain from stuttering, mumbling or saying "Ee-um, let's see," or "Listen"; state your business in a short concise form and do not be stingy with your "thank you's" for any favors.

### Insurance Papers

I think a word could be said at this time about the insurance patient. All the papers that are necessary to make out on the Workmen's Compensation cases gave me a good many headaches, until we had printed cards made especially for these records. It is a card 8 inches by 5 inches and is kept in a file separate from all other records. On this card is a place for patient's name and address, firm for which he works, and the name of the insurance company that carries the liability. Age, marital

status and color, place for when first and final reports were in. History of injury, diagnosis and when and who took roentgenograms and the report of the x-ray findings. Examination of patient. On the back is a place for the charges. The first report is sent in as soon as possible. This, I can do in the morning without having to bother doctor with questions, and the final report as soon as we have finished with the patient. If a careful record is kept, these cases are very easy to handle and you will find that they are the best pay cases you have, so are well worth taking care of.

### Mail

Taking care of the doctor's mail can come under another head. Everyone knows who works in a doctor's office, the untold amount of advertising that the doctor receives. After you have worked for him a short time you soon learn which ones he likes to look over and the ones that hit the wastepaper basket with only a passing glance. These you can open and discard, the checks you list very carefully, on your records and also on the deposit slip. All personal mail should be placed in one pile, in a convenient place on his desk so that he can go over it hurriedly when he first comes in. All insurance reports and requests for histories from other doctors can be placed in another pile. To these you should have their histories looked up and attached to the letters, so that when your doctor has a leisure moment he can fill these out with very little trouble. The bills should be placed in a drawer or special file after having been checked to see that they are correct. Then on or before the tenth of every month all bills should be paid. You can save the doctor time by writing the checks and placing them on his desk for his signature. He will appreciate your looking after these details for him. As you buy supplies and pay his bills, you should have a special book, correctly tabulated for your income tax records. I assure you, this kept up from day to day and month to month will save you and your doctor many a headache at the end of the year when this record has to be made out.

### Collections

Now we reach the last but not least of our troubles, "Collections," which is to most doctors the hardest part of their profession. Each of us, I know, has our own particular theory of how we should approach this problem. Everyone will, however, agree that the primary necessity is the absolute confidence placed in us. Building upon this confidence, we must, of course, vary our program to suit the type of practice which our doctors enjoy. Thus, a collection procedure based upon a rural community will differ radically from that of the urban community.

There will be the necessity of pointing our collections toward varied "Crop Types," as against partial payment system based upon pay rolls. In any procedure, however, we must remember that the work connected with this will rapidly grow into a Frankenstein and prove unworkable simply because of the volume of correspondence which it creates. Therefore, it has been considered advisable to eliminate, as much as possible, the personal element in dealing with routine collections. By this classification I mean the type of account which becomes, let us say, sixty to ninety days past due. I will endeavor to tell you some of the plans we use, not particularly because I believe that they are the best, but because they eliminate to a large extent the amount of personal correspondence required. In the case of the patient which is to be hospitalized, we immediately fill out a card which I will call Exhibit No. 1. The information on the back of this card is not filled out unless the patient immediately requests credit accommodations. The husband or the wife of the patient is contacted and such information regarding the status of the patient is obtained from that source. The Credit Bureau, if such is available, is called to ascertain the paying habits. We have experienced difficulty at times in obtaining information on people living in the country some distance from Topeka. I find however with very little trouble you can establish sources of information in various small towns, through the owners of mercantile stores, banks, etc. These people can be contacted by phone and any information they have available is obtained. Through the banks we can obtain the patient's attitude toward taking a loan that will combine the hospital and medical bill. We find in a great many cases the banker is already holding papers on the party and by discounting our bill, he is willing to combine them with the papers he already holds. If a patient is

willing to borrow the money to pay his bill in full, we are always willing to discount the bill to the extent of whatever interest he has to pay to get the money. In Kansas, the crop mortgage is good only for the year in which it is written. Naturally the mercantile company or the bank is going to take a mortgage, not only for the crop, but upon the livestock and any other tangible collateral which the patient may have. Thus, if, as so often is the case, the amount realized from the crop is insufficient to pay off the first mortgage, then the holder of that mortgage is unable to rewrite his crop lien without sacrificing his priority claim, as the law provides that the rewriting of such is evidence that the prior claim has been satisfied. In this way, you will see that the second mortgage has a very definite nuisance value.

In regard to the patient who has more or less steady income, there are two courses open to us.

1—To persuade the party to go to the bank and borrow from them the amount required. I am sure there are banks in all the larger places that have a special department for this type of loan.

2—To handle them ourselves through a partial payment plan.

The number two plan sems to be the more favorable, especially for obstetrics and surgery, as these generally are the larger types of bills. Take the obstetrical case and the charge would be, say $50.00, and you get the case at the fourth month of pregancy. A payment of ten dollars a month and your bill is paid by the time the baby arrives. In the operative case, the money starts a little later, as my doctor always tells them to pay the hospital bill first.

Now we come to the third type of procedure, and to my mind the most bothersome, which is that of dealing with the ordinary garden variety of open accounts. On this type of statement we send the bill once a month, sometimes on the first and sometimes on the 15th. We find quite often that if sent on the 15th we get more response than on the first, as they seem to have so many bills to take care of on the first. After ninety days, if we get no response, the account is considered delinquent and routine collection procedure is inaugurated. For this we have three letters we send out, one a month for three months. The first is as follows:

Name—
Address—
Amount of bill—

May we call your attention to your account with us in the above amount. We have sent you several statements which you may have overlooked. If you are unable to make prompt payment, kindly let us know when we can expect your remittance. If you cannot pay in full now, won't you please mail us a check for half, and send us the balance next month?

Please let us hear from you this week, without fail.

Yours truly,
(Signature)

If we do not get any response, then this letter is sent:

We again call your attention to the past due account listed above. We do not think it is your intention to evade the payment of your debts, and are assuming that you, like so many other people, have taken the mistaken attitude of saying nothing when you have been unable to pay.

Our doctor did not hesitate to serve you when you were in need of help. We appeal to your sense of fairness. Surely you could let us know the circumstance and possibly some plan could be worked out to insure payment of this account and yet work no hardship on you. You may be assured that we will go along with you on any reasonable arrangement you may care to make.

Yours truly,
(Signature)

And the third and last letter:

Our records indicate that we have sent you several statements and are forced to write you in an effort to make suitable settlement to this claim. We feel sure that you have no reason to contest the amount of these charges and we must look forward to the immediate payment of same.

It is going to be necessary to turn over to the Credit Bureau our list of delinquent accounts and we are sure you do not wish yours to be placed on a record that will affect your credit wherever you may go.

We should regret being forced to do this and we ask your coöperation in immediate settlement of this bill.

Yours truly,
(Signature)

Then, of course, if we get no response, the amount is turned over to our collection agceny to let them see what can be done. The bill that is turned over to the collector should be filled out in complete detail, as so often patients will dispute a certain item of the bill and if your collector has the complete information in front of him, he will be in a position to discuss this matter intelligently and to make proper adjustments without bothering your doctor.

Obviously, this type of letter is sent only those we know can pay and won't. Anyone who

has ever worked in a doctor's office knows that her doctor does an untold amount of work each year for the low salaried and indigent patients, for whom a charge is never placed on the books.

———MSMS———

# Gall-Bladder Disease

## Surgical Treatment*

**L. J. Gariepy, M.D., and J. H. Dempster, M.D.**
**Detroit, Michigan**

Louis J. Gariépy, M.D.
*M.D., University of Michigan, 1922. Senior Surgeon, Mt. Carmel Mercy Hospital; Consultant Surgeon, Wyandotte General Hospital, Wyandotte; Associate, Redford Receiving Hospital; Surgeon of Detroit Medical, Surgical and Dental Group. Member, Michigan State Medical Society.*

■ The discriminating surgeon who regards the reputation of his art will carefully select his operative cases and will confine surgical treatment to such conditions as gallstones, empyema, hydrops produced by stenosis of the cystic duct, obstructive jaundice due to stone in the common duct, or chronic pancreatis due to gallstone or gall-bladder pressure. Cholecystitis cases not benefited by dietary and medical treatment naturally belong to the domain of surgery.

Surgical treatment of gall-bladder disease is a matter of choice with the surgeon and needless to say it must be made to conform to the condition present. The surgeon may be a good technician, a good operator, but if his surgical judgment is not good, his results will be unsatisfactory.

The question of removal of the gall bladder rests entirely with the operator, who must take into consideration the condition of the patient as well as the condition of the gall bladder. I have in many instances drained gall bladders that I felt at the time should come out, but rather than subject the patient to greater risk, a drain was inserted and the gall bladder removed, in a few cases, three or four months later. When the abdominal cavity was opened for the secondary operation the gall bladder had almost entirely atrophied so that the symptoms of which the patient complained were evidently due to adhesions about the common duct.

*Read before the Staff of Mt. Carmel Mercy Hospital, Detroit, Michigan, Oct. 4, 1940.
Dr. Dempster's part in the study of gall-bladder disease, the treatment of which is presented in this paper, consisted in the x-ray diagnosis of the various cases under consideration.

Any abdominal operation should attain its object with as little trauma to the viscera as possible, to the end that shock may be minimized, postoperative discomfort reduced, convalescence shortened and adhesions prevented. With this in mind, all cases are prepared carefully so that if at all possible the abdomen may be closed without drainage. In suggesting as a routine procedure, the closing of the peritoneal cavity without drainage after a cholecystectomy, one departs from the standard technique to an extent that few surgeons would care to follow.

**The obvious advantages from closing an abdominal wound without drainage after removal of the gall bladder are:**

**Few postoperative peritoneal adhesions.**
**Simple conditions, if necessity for re-opening arrives.**
**Simplified after-treatment and more rapid convalescence.**
**Less discomfort to the patient, no painful removal of drain.**
**Less danger of postoperative ventral hernia.**
**Avoidance of possibility of persistent sinus formation.**
**Avoidance of mechanical interference with gastric function due to pressure on duodenum, and partial or complete duodenal obstruction.**
**Less danger of bile leakage when gauze drain is used over the cystic stump.**
**Avoidance of pulmonary infarct, following the removal of the drain.**

Cholecystectomy without drainage shortens the hospital time so much that the average patient can be discharged from ten to twelve days following the operation. This factor is also important when the finances of the patient are a matter of consideration.

### Technique

In most cases the gall bladder is removed from above downward. I first aspirate the gall bladder with a special device which is a suprapubic aspirator pump to which is attached a sterile rubber tube inserted into a sterile bottle. This tube has a special fenestrated needle which is used for suction. The bile enters the bottle and the gall bladder is then easily removed from above downward with very little trauma or shock.

Routine management of the gall-bladder patient consists in elevating the bed on six inch blocks after the return from the operating room and providing him with a pneumonia jacket as well as a Scultetus binder. Glucose and saline are given intravenously as a routine and insulin is

given to diabetics. In many instances when postoperative vomiting is present, a small dose of insulin checks the nausea and vomiting.

### Statistical Study

During the four-year period ending August 10, 1940, I have operated on 274 patients with gall-bladder disease. For convenience of study they are here tabulated:

TABLE I. DIAGNOSIS

| Type | Cases | Percentage |
|---|---|---|
| Chronic cholecystitis | 229 | 83.58 |
| Acute cholecystitis | 22 | 8.04 |
| Hydrops of gall bladder | 5 | 1.82 |
| Empyema of gall bladder | 9 | 3.29 |
| Gangrene of gall bladder | 3 | 1.09 |
| Ruptured gall bladder | 1 | .36 |
| Cancer of gall bladder | 3 | 1.09 |
| Common duct stone | 2 | .73 |

TABLE II. CHOLECYSTITIS

(Non-Calculus)

| Type | No. of Cases | Percentage |
|---|---|---|
| Acute | 9 | 3.29 |
| Chronic | 112 | 40.88 |
| Empyema | 3 | 1.09 |
| Cancer | 2 | .74 |
| Hydrops | 1 | .36 |

(Calculus)

| Type | No. of Cases | Percentage |
|---|---|---|
| Acute | 13 | 4.74 |
| Chronic | 117 | 42.70 |
| Gangrenous | 3 | 1.09 |
| Empyema | 6 | 2.19 |
| Cancer | 1 | .36 |
| Hydrops | 4 | 1.46 |
| Common duct stone | 2 | .74 |
| Ruptured gall bladder | 1 | .36 |

TABLE III. AGE INCIDENCE

| Age | No. of Cases | Percentage |
|---|---|---|
| 0- 9 | 0 | 00 |
| 10-19 | 0 | 00 |
| 20-29 | 12 | 4.38 |
| 30-39 | 55 | 20.08 |
| 40-49 | 99 | 36.13 |
| 50-59 | 76 | 27.73 |
| 60-69 | 31 | 11.32 |
| 70-79 | 1 | .36 |

The youngest male was 21 years; the youngest female also 21 years. The oldest male age 58 years and the oldest female age 75 years.

| Sex | No. of Cases | Percentage |
|---|---|---|
| Male | 37 | 13.23 |
| Female | 237 | 86.77 |

Deaths 8, or 2.92 per cent; 7 females and 1 male.

Glycosuria was found in 28 cases (25 females and 3 males) of gall bladder pathology, or 10.21 per cent.

Jaundice was found in 29 cases (24 female and 5 male). There was concurrent pathology in the appendix and an appendectomy because of concurrent pathology in 92 (33.57 per cent) of the 274 cases in conjunction with the gall-bladder surgery.

There were 65 cases (23.72 per cent) wherein the liver showed macroscopic pathology, such as both stages of cirrhosis and multiple cysts.

Concomitant pathology found at the time of the operation may be listed as follows:

Cancer of the liver—4 cases
Cancer of the ampulla of vater—1 case
Cancer of the pancreas—1 case
Cancer of the cecum—1 case
Multiple cysts of the liver—1 case
Peptic ulcer—3 cases
Sciatica—2 cases
Coronary thrombosis—1 case
One typhoid carrier
Acute pancreatitis—2 cases
Intestinal obstruction from a gallstone following a ruptured gall bladder—1 case

### Drainage

There were 78 cases in which drains were left in the gall-bladder fossa. These drains were left in place for an average of 5.92 days. The shortest drainage period for this group was 2 days; and the longest drainage period, 14 days. There were 33 cases in which a cholecystotomy was done. In these cases the drainage tube was left in place on an average of 9.13 days. The shortest drainage period was 5 days; and the longest drainage period was 16 days.

### Cholecystitis and Associated Conditions

Regarding the coincidence of cholecystitis with other diseases, no exhaustive study has been recorded. The association of gall bladder with other diseases is therefore largely a mater of clinical impression.

The association of diabetes with cholelithiasis, where the two conditions are concurrent, is presumed to be due to damage of the pancreas by extension of disease from the biliary passages. It is difficult to prove, says Allen (*loc. cit.*), that gallstones cause diabetes; the conclusion may be that the diabetes is secondary to the cholelithiasis or to other infection of the biliary tract. The association of diabetes and gallstones, particularly in women over 40 years of age, would warrant a search for the other condition when one

was found present. In other words, a diabetic patient past 40 should be examined for gallstones and the gallstone patient in the same age group should have frequent urinalyses to determine the presence of glycosuria. Seeing that pressure of gallstones on the head of the pancreas may be associated with diabetes, it is well to check over all diabetics to ascertain a positive cause of the disease. Though the percentage of diabetes resulting from gallstones may be small, the search is worthwhile. In my series of 274 cases which came to operation over a four-year period, glycosuria was found in 28, or a percentage of 10.21.

Cholecystitis is so common especially during the fourth, fifth and sixth decades of life that its incidence is only less than vascular and cardiac disease and diabetes. Operative treatment of cholecystic disease is very frequently followed by a concurrent improvement in some other coexistent disease. Many surgeons concur in the belief that such abdominal diseases as chronic hepatitis, pancreatitis and appendicitis are associated with gall-bladder disease. No association, however, has been noted between peptic ulcer and cholecystitis. Peptic ulcer is apt to be associated with the tall, narrow chested habitus; gall-bladder disease with the broad habitus.

In this series of 274 cases, 92 appendectomies were performed but I do not wish to leave the impression that appendicitis is a causative factor of cholecystitis or vice versa. I can see no necessary connection as in glycosuria and some forms of cholecystic disease. Many gall-bladder patients gave a history of symptoms that pointed to a chronic appendicitis sometime in their lives which had become quiescent or latent. A number of patients operated on by me for gall-bladder disease had also been operated on by other surgeons for appendicitis.

### Conclusions

Patients operated on for gall-bladder disease of various types in the four-year period ending August 10, 1941, numbered 274. This number constitutes only those instances of gall-bladder disease which have been treated surgically.

In the matter of diagnosis reliance was placed on the clinical manifestations, together with x-ray study by the Graham-Cole method.

Cholecystectomy was the operation of choice. In a great majority of instances complete closure of the operative wound following operation was done. It is believed this practice has a distinct advantage over that of routine drainage.

The cases have been summarized on the basis of type of pathology, age and sex incidence and with regard to associated pathological conditions. We have found a certain relationship between some cases of glycosuria and gall-bladder pathology. This relationship warrants examination of the diabetic patient routinely for gall-bladder disease and, conversely, studying of each patient presenting a gall-bladder syndrome for evidence of a diabetic tendency.

———MSMS———

# Epilepsy as a Traffic Hazard

**L. E. Himler, M.D.**

**Ann Arbor, Michigan**

L. E. Himler, M.D.

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■ The provisions of practically all of the forty-five states possessing operators' license laws include some type of restriction against individuals who are unfit to drive. Michigan's Act 91 of 1931, which is patterned after the so-called "Uniform Motor Vehicle Operators' and Chauffeurs' License Act," expressly prohibits licensing anyone who is "afflicted with or suffering from such physical or mental disability as will serve to prevent such person from exercising reasonable and ordinary control" while operating a motor vehicle upon the highways. License is also withheld from any person who has been adjudged by the courts to be "insane, or an idiot, imbecile, epileptic, or feeble-minded" and has not been restored to competency by judicial decree. Even then a driver's license is not granted unless and until the department given the responsibility for issuing licenses is satisfied that the individual is capable of operating a motor vehicle with safety to persons and property.

The necessity of uniform and effective measures aimed at eliminating the danger of epilepsy in traffic is self-evident when it is recalled that of the 500,000 or more patients with epilepsy in the United States, fully 450,000 are not in institu-

tions but are living in the community. Half of these have already begun to have attacks by the time they are old enough to drive cars, and two-thirds of them have had their first attack before they reached the age of twenty. Regardless of licensing restrictions, physicians who make special inquiry into this point are well aware that a considerable proportion of patients with epilepsy do not refrain entirely from driving motorcars. Although accidents from this cause are not unknown, up to the present time no statistical evidence is available which would disprove the belief held by both physicians and safety officials that traffic accidents attributable directly to epilepsy are quite infrequent.

A summary prepared by the National Safety Council for 1939 reveals that 0.5 per cent of the drivers involved in fatal accidents and 0.3 per cent of the drivers in non-fatal accidents had some physical defect "other than intoxication, fatigue, poor eyesight and poor hearing." This is equivalent to about 200 drivers in fatal accidents and approximately 4,000 drivers in non-fatal accidents. Epileptic disorders are not reported as such and of course cannot be arbitrarily presumed to constitute more than a fraction of even this restricted group, since under the same classification are included a variety of miscellaneous physical defects such as would hinder the use of arms and legs, cerebrovascular and cardiac conditions, acute uremia, acute acidosis, vertigo, narcotic poisoning, and sudden painful conditions which might result in syncope or temporary loss of control—to mention but a few.

**Accident statistics alone, however, can give only very incomplete information on this subject, not only because patients who survive an accident would be disinclined to tell of their attacks, but more importantly because reporting police officials could scarcely be expected to recognize or distinguish post-seizure states from such causal conditions as fatigue or falling asleep. In this connection, one can only speculate on what proportion of the many accidents reported as "driving on wrong side of road," "driving off roadway," and "reckless driving" might be related to epileptiform states.**

Some light is thrown on the incidence of epileptic patients who drive motorcars by reports dealing with traffic offenders. Among 100 unselected violators coming before the Detroit Recorder's Court during a single month, there was one with active epileptiform attacks and one with suspected epilepsy.[5] Of 348 offenders referred to the traffic clinic of the same court during 1937, a history of epilepsy was obtained in one and a question of epilepsy occurred in two other cases.[6] While the number of cases is too small to have general statistical validity, it is significant that in both groups of offenders the proportion with verified attacks is higher than for epilepsy among individuals of all ages in the population at large.

### Plan for Regulation

Aside from the problem of enforcement, unconditional denial of driving privileges to all patients who have or have had any type of seizure, although the only completely safe method would result in manifestly unfair discrimination in many individual cases. In this category would fall those with seizures occurring only during sleep, and those who are certain of a sufficient warning period to prevent any mishap on the road. It is especially important to include in this group those patients who are free of attacks as long as they continue faithfully under medical treatment and supervision. What is said with respect to motorcar drivers, of course, applies equally to airplane pilots and those who operate motorcycles and bicycles on the highways.

Although methods of examining applicants for drivers' licenses vary markedly from state to state, inquiry concerning the presence or absence of "epilepsy" is generally designated as part of the duties of the police official in charge of registration. Since the term "epilepsy" as used by the layman is ordinarily restricted to mean convulsive seizures of the grand mal type, it is possible that some individuals might truthfully answer in the negative to such a routine question, and yet be afflicted with petit mal, psychomotor, or narcoleptic attacks which might be equally as dangerous in traffic as grand mal. The patient with petit mal seizures lasting over a second or two may be in even greater peril, since attacks of this type may occur quite frequently, generally with no warning, and often are related to sudden stress such as might come up in traffic situations. The writer has had contact with two such cases during the past year, one of whom reported numerous "close calls" and the other actually

went off the road twice during typical attacks, yet both of these patients were in possession of drivers' licenses, and although aware of the element of danger, did not consider themselves as "epileptic."

Confusion over interpretation of the term "epilepsy" can be avoided by requiring applicants to answer a specific written question referable to the presence of any type of paroxysmal condition. A composite driver's license application blank, proposed by the American Association of Motor Vehicle Administrators,[1] combines the experience of several states and includes the following as one of twelve questions:

> Have you ever had an attack of epilepsy, paralysis or heart trouble, or are you afflicted with fainting or dizzy spells or any disability or disease which might affect your ability to operate a motor vehicle in a safe manner at all times and under all conditions? (Yes or No). If you have, give date, and describe condition.

Applicants who answer affirmatively are then required to submit a physician's statement with regard to their competency to drive with safety. In Michigan, patients with epilepsy who have been free of attacks for at least two years may be granted or reissued a license after proper investigation by the Commissioner of the Traffic Division.

### Privileged Communications

The wide variety and complexity of problems which arise in any consideration of the epileptic driver inevitably bring up questions relative to the sanctity of medical confidence and how far such a patient has the right to be protected by privileged communications. Dr. Monrad-Krohn, the Norwegian neurologist, states unhesitatingly that "in the face of a very real danger, it would seem that the community has a right to demand control even if it involves a necessary infraction of professional secrecy on this point."[4] At the Eighth Scandinavian Neurological Congress held in 1939 a unanimous resolution was passed recommending "that it be in some way established that it is a duty of practicing physicians without regard to their obligation of silence, in some way to notify the authorities, whenever in their practice they discover a patient suffering from epilepsy in the possession of a driving vehicle and making use of it."

An important step toward the solution of this problem was taken by the state of California, where in September, 1939, a law became effective designating epilepsy as a reportable disease.[2] Physicians in that state are now required to notify the State Department of Public Health of all patients with such a diagnosis, and this data is then made available to the Motor Vehicle Department. Failure of the physician to report constitutes a misdemeanor. In so far as it is possible to enforce a quarantine law of this type, the licensing of at least those patients who come under physicians' care because of obvious and undisputed grand mal will be effectively barred. However, because of the unsatisfactory status of the term "epilepsy," this regulation as it stands still allows for confusion and omissions, especially where seizures are not clearly defined or where the differential diagnosis is obscure. During the first six months the California law was in force, 2,780 cases were reported, but only 437 of this number were from counties not containing institutions in which epileptic patients were hospitalized.

Dr. Monrad-Krohn suggested a plan of another type which would avoid some of the above objections. This would require the physician by law to give a statement to all patients who are subject to paroxysmal disorders regarding their competency to drive a motor vehicle, a copy of which is submitted to the traffic officials. This step, while not placing the burden of a final decision on the physician, nevertheless makes it obligatory for him to acquaint the patient of the mutual responsibility which he shares with regard to traffic regulations. Final approval, denial, or restriction of drivers' license privileges might properly be vested in a duly authorized medical examiner, preferably one attached to the State Health Department. The patient should in no case be deprived of his right to petition for a hearing and submit statements relative to his condition from physicians of his own choice. While it may be objected that such a plan destroys confidential relationship and may discourage some patients from seeking medical aid, it might on the other hand actually strengthen the physician-patient relationship in the end, since a satisfactory period of observation and treatment opens the way for official recommendation for a license. Full professional secrecy would of necessity be required from traffic and police authorities who share confidential information with physicians under any such arrangement.

### Method of Control

Whatever ultimate disposition is made of this complicated problem, it would seem only just in the interests of both society and the individual that no patient who is subject to seizures should be granted a license until proper investigation is made by a physician trained in neuropsychiatry who is equipped to make valid judgments concerning an applicant's fitness as a motorcar driver. Among the special diagnostic procedures utilized in the study of epilepsy, electroencephalography[3] has become outstandingly important. Repeated at regular intervals, the electroencephalogram gives an objective record which is invaluable both in substantiating the diagnosis and in providing an index of the effectiveness of treatment.

The medical, neurological and psychiatric appraisal of each case should include a satisfactory control period of observation as a basic requirement before a license or reinstatement is granted. Licenses granted to patients who have had seizures should be renewed on an annual basis, contingent upon the progress of the condition, the absence of organic or psychiatric contraindications, and adherence to a well regulated regime with relation to drugs and physical habits, including strict abstinence from alcohol. Follow-up information in addition to the physician's statement should include a social history from relatives and others who are closely acquainted with the case. The patient must be given to understand that his license to drive is directly dependent upon a successful therapeutic plan, and is by no means to be construed as official recognition that he is "cured" or that preventive procedures may be relaxed.

### Summary

Viewed solely from the standpoint of available morbidity and mortality statistics, epilepsy and epileptic disorders probably do not account for a numerically alarming number of traffic accidents. As a road hazard the danger of epilepsy lies not in the frequency of its occurrence, but rather, like lightning, in its suddenness and unpredictability.

There is a real need for uniform regulations in all states with regard to the operation of motor vehicles by individuals who are subject to seizures, and these should be according to a plan which will not only insure maximum safety for the patients as well as others, but also one which would give physicians a means of adequately discharging their obligation both to the patient and to the community.

The danger of epilepsy in traffic situations can be largely controlled by a comprehensive, socially integrated, preventive approach. There is every likelihood that a concerted and efficient application of all the medical and legal measures at present at our disposal would bring the risk of accidents due to epileptic disorders to a humanly irreducible minimum.

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# Intravenous or Retrograde Pyelography?

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■ Intravenous pyelography has been in use about 10 years and is gradually assuming its proper place in the diagnosis of urological lesions. Uroselectan was introduced in 1929 by Von Lichtenberg and Swick and has proved, indeed, a boon in the diagnosis of urological lesions. The formula of the iodine compound has been improved so much that now it is quite an innocuous substance in the vein or in the ureter.

**It was thought at first that this new procedure would replace the use of the cystoscope and retrograde pyelography but, in spite of the tremendous advance made in the use of this substance, much ill-advised surgery must have been, and will be, performed, if reliance is placed solely on intravenous pyelograms. It should be considered an adjunct and not a complete diagnostic measure in most cases.**

We made a survey of eighty-nine hospital (or bed) cases in which intravenous pyelography was done, the study of which serves as a guide to the evaluation of this modality. Table I reveals that females outnumber males to an appreciable extent, probably due to the fact that there are more abdominal complaints in women and therefore they have more of a need for differential diagnoses.

TABLE I

| | |
|---|---|
| Number of Intravenous Pyelograms | 89 |
| Sex: | |
| Males | 39 |
| Females | 50 |
| Age: | |
| Oldest | 82 yrs. |
| Youngest | 14 mos. |
| Average | 50 yrs. |

The oldest patient was eighty-two years and the youngest was fourteen months; in the latter case the dye was given in the external jugular vein. A simpler manner of administration when it is difficult to get into the vein, or in the case of infants, is that of Nesbit's in which 20 c.c. of the iodine compound is mixed with 80 c.c. of normal saline and equal parts are injected over each scapula subcutaneously, preceded, possibly, by an injection of novocaine.[2]

Attention to certain details of technique will enhance the value of intravenous pyelography. We believe it is valuable to withhold fluids for at least twelve hours before the pyelograms are made so as to give a better concentration of the dye. One to two ounces of castor oil are given the night before and, if not contraindicated, ½ to 1 c.c. of pitressin is given one-half hour before the intravenous dye is given.

Immediately before the dye is given the patient is questioned as to his tendency to allergy or sensitiveness to iodine compounds. If this condition is present, the determination of the sensitivity to the dye should be obtained by the method of Dolan.[1] He recommends that 1 c.c. to 2 c.c. of the iodine substance be held in the mouth for about ten minutes. If no reaction occurs, the substance may be swallowed and one must wait another thirty minutes to determine the possibility of any sensitivity to the agent.

A slight Trendelenburg position is maintained throughout the taking of the pictures unless an upright position is desired for one of the films. In a group of hospital patients where such a high percentage have abdominal pain or renal colic and hence, usually, considerable gas, and where urgency may prevent adequate preparation of the patient, intravenous pyelography is encumbered with radiologic technical difficulties not usually found in the ambulatory patient.

Table II indicates the chief complaints of patients on whom the intravenous pyelograms were done.

TABLE II

| Chief Complaint | Number |
|---|---|
| Pain | 52 |
| Frequency | 7 |
| Fever | 6 |
| Dysuria | 3 |
| Nausea and vomiting | 0 |
| Hematuria | 2 |
| Colic | 0 |
| Pyuria | 1 |
| Distention | 1 |
| Impotence | 1 |
| Diarrhea | 1 |
| Loss of weight and appetite | 2 |
| Anuria | 1 |
| Pruritis vulvae | 1 |
| Dyspnae | 1 |
| High blood pressure | 1 |
| Urgency | 1 |
| Nervousness | 1 |
| Not listed | 7 |
| Total number of cases | 89 |

Pain in some part of the abdomen is by far the most frequent symptom and this justly so. Where symptomatology is indicative more of infection, hematuria, or a purely urinary complaint, cystoscopy and retrograde pyelograms will furnish the most complete evidence and at less delay to the patient.

Table III gives the diagnoses that were made from intravenous pyelograms.

In sixteen cases or 18 per cent no diagnosis could be made. Thirteen doubtful normal and twenty-five definitely normal pyelograms make thirty-eight cases or 42 per cent of the total. Doubtful normals are those wherein a little imagination is necessary to construct a picture of a normal pelvis but because of the good excretion of the dye and the remainder of the clinical

TABLE III

| Diagnosis by Intravenous Pyelogram | Number |
|---|---|
| No diagnosis | 16 |
| Doubtful normal | 13 |
| Normal | 25 |
| Dilation of: | |
| Calices | 11 |
| Pelvis | 18 |
| Ureter | 5 |
| Bladder | 0 |
| Stone in: | |
| Parenchyma | 3 |
| Calices | 3 |
| Pelvis | 2 |
| Ureter | 8 |
| Bladder | 0 |
| Ptosis | 4 |
| Kink of ureter | 6 |
| Anomaly | 0 |
| Tumor | 1 |
| Miscellaneous | 1 |
| Nephrogram | 2 |
| Stricture | 0 |
| Double kidney | 1 |
| Rotation | 1 |
| Anomalous vessel (?) | 2 |
| Bladder tumor | 1 |

history, they can be classified as normal. Thirty-four cases or 38 per cent give pictures of dilation somewhere in the urinary tract. It is in this instance that the intravenous pyelogram seems to give the best definition. The remainder of the cases are well distributed as to their occurrence.

Table IV reveals that a retrograde pyelogram was indicated and done in twenty-four of the cases. Indications for making the retrograde pyelograms were simply that the intravenous pyelogram could not tell us definitely and completely what pathology was present.

TABLE IV

| | |
|---|---|
| Number of retrograde pyelograms | 24 |
| Diagnoses confirmed | 10 |
| Changes or additions in diagnoses following retrograde pyelogram | 14 |

In ten cases the diagnosis by intravenous pyelography was confirmed and in fourteen cases there was an additional diagnosis made, or the diagnosis was changed by retrograde pyelogram. If these latter fourteen cases are added to the sixteen cases in which no diagnosis could be made, there is a total of thirty cases (30 per cent of the total) wherein intravenous pyelogram could not be relied upon as a diagnostic picture of the case.

There were nine kidney operations done in which the diagnosis was confirmed in seven and changed in two instances.

## Conclusion

In conclusion it might be stated from these findings and experience that:

I. Patients of any age may be examined by intravenous pyelography.

II. The intravenous method is indicated in:

1. Differential diagnosis of obscure abdominal pain.

2. When the instrumentation of cystoscopy is contraindicated or where one wishes to shorten the procedure as much as possible by first obtaining as much information as one can by intravenous pyelography.

3. Tuberculosis of the genito-urinary tract, as instrumentation in these cases should be kept at a minimum.

4. Cases of stone, particularly in the kidney or ureter. Here intravenous pyelography is especially helpful because of obstruction in the tract if the obstruction has not been present long enough to embarrass the function of the kidney.

5. Double kidney or ureter which is sometimes missed by retrograde method.

6. Trauma of the genito-urinary tract where instrumentation is to be kept at a minimum.

7. Possible obstruction of the ureteral orifice by bladder tumor.

III. The intravenous method is contraindicated in:

1. Cases of known poor urinary function where pyelograms will not be obtained because no dye is excreted by the kidney.

2. Idiosyncrasy to the dye or history of allergy, particularly to iodine compounds, in which cases the determination of sensitivity should be obtained by the method of Dolan.

IV. In about one-third of the cases a complete diagnosis cannot be made by intravenous pyelography.

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# President's Page

## The Annual Meeting, and Farewell

THE complete program of the 1941 Annual Meeting of the Michigan State Medical Society appears in this number. For a state medical society, it is unique in quality, variety and size. Verily, it merits the paraphrased title of "Michigan's Medical World Fair."

Doctor, peruse the program in this issue. Incidentally the M.S.M.S. JOURNAL, each and every month, contains much information of value to you in your practice. I recommend to each member the good habit of carefully reading the monthly State Medical JOURNAL. It will share important dividends with the reader.

The final paragraph of this, my final page, is one of sincere appreciation and thanks to all who helped contribute to the progress of the year 1940-41. Any success of this administration can be traced to the generous work of our society committeemen and officers.

For my able successor, Henry R. Carstens, I solicit the same loyal support that has been my fortunate lot.

A R Urmston

President, Michigan State Medical Society

# EDITORIAL

## HIS FATHER'S FOOTSTEPS

■ When Henry Carstens assumes the position of president of the Michigan State Medical Society at our Seventy-Sixth Annual Meeting in Grand Rapids in September unusual history will have been made, for it is the first time in the many years of organized medicine in Michigan and probably a most unusual coincidence in any state that a son of a previous president of a state medical society would achieve the same office.

Doctor Carstens' father, J. Henry Carstens, was born in Kiel, Germany, on June 8, 1848 and died in Detroit, August 7, 1920. The personal and professional history of the first Doctor Carstens is most interesting and thrilling. He came to Detroit with his parents as a small boy and graduated from Detroit Medical College in 1870. He began the practice of medicine immediately. For nearly fifty years he had lectured and taught various branches of medicine and surgery to generations of medical students. At the time of his death he was the President of the Detroit College of Medicine and Surgery and Professor of Gynecology at the same institution. He was on the staff at Harper Hospital and the Woman's Hospital. He had been president of the Wayne County Medical Society, an office which has already been filled by his illustrious son, and was president of the Michigan State Medical Society in 1909. He was a member of the Mississippi Valley Medical Association, the American Gynecological Association and the American College of Surgeons. Doctor Carstens took a great deal of interest in city politics and was candidate for mayor of Detroit on several occasions. He was formerly a member of the Detroit Board of Education and the Detroit Board of Health. For many years Doctor Carstens was an active member of the Harmony Club and also belonged to the Detroit Athletic Club and the Detroit Club. Doctor Carstens was one of the most widely known physicians not only in Michigan but throughout the United States.

The story of the present Dr. Henry Carstens hardly needs to be elaborated. After serving for a number of years as a member of The Council and as chairman of The Council he became president-elect last year. It is of particular note that he is governor of the American College of Physicians for the State of Michigan. He has been on The Council of the Wayne County Medical Society and has been its chairman. He is the president and medical director of the Michigan Medical Service and possesses an enviable reputation as an internist.

His keen mental perception, his sense of fairness and his unusual clear thinking mark him as a man who will lead the Michigan State Medical Society on to higher levels than ever before.

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## YOUR WISH HAS COME TRUE

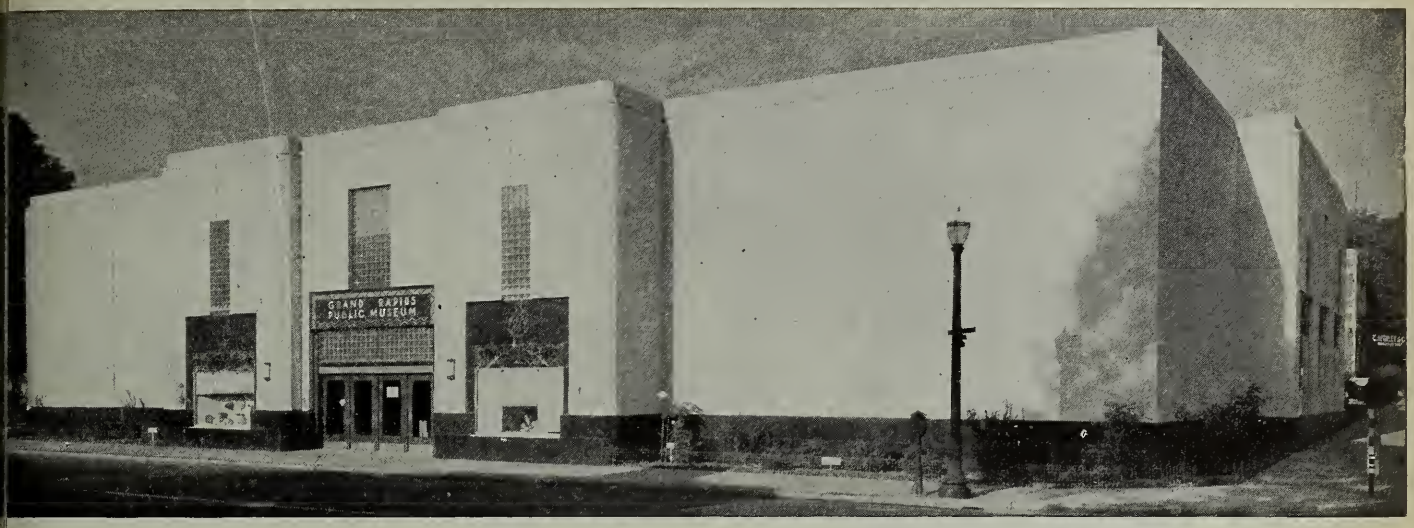
■ How many times have you wished, after listening to a noted authority speaking at a scientific meeting, that you could ask questions or have some points made more clear to you?

**Your wish has come true.**

After the Wednesday and Thursday sessions of the Annual Meeting of the Michigan State Medical Society, a discussion period will be held for the various departments of medicine at which the invited essayists will answer inquiries. It is something new, an innovation which makes one of the greatest of the state medical meetings even more valuable to you than before.

**Sixteen of the world's best qualified specialists will present their views and findings to you in a public address, on these days, and then be available for your further questions at the close of the afternoon session. All the meetings are held in the same Civic Auditorium in the "Furniture Capital of America," the second city of Michigan.**

If you are interested in medical progress you **must** attend the Seventy-Sixth Annual Meeting of the Michigan State Medical Society, September 17, 18, and 19; the biggest three days in medicine that Michigan has ever known.




Grand Rapids Public Museum

## WHAT ABOUT GRAND RAPIDS?

Grand Rapids, the mecca for Michigan Medicine September 17, 18 and 19, has an interesting history with its rapid and distinctive industrial development. It is the second city in size in this state. The annual conventions of the Michigan State Medical Society have become so large that only two cities in the state have convention halls sufficient to accommodate the meetings, as well as exhibits which have become a most important feature of the annual meetings within recent years. The evolution of scientific medicine has caused a great development by way of invention of diagnostic and treatment equipment as well as refinement in drugs and foods intended for the sick.

Grand Rapids, we repeat, has an interesting history. The name is descriptive of the rapids in the Grand River. A little over a hundred years ago, one hundred and fifteen to be exact, Louis Campau, a French pioneer, established a trading post there, purchasing the ground for ninety dollars. A second pioneer was Lucius Lyon, who, having surveyed the site for the government, had intended to buy it for himself. He was forced to purchase it, however, from Campau at a much higher price. It is said that this transaction resulted in an estrangement between the two pioneers, the effect of which is seen in the present peculiar layout of the downtown district of the city. The two pioneers disagreed as to the name of the locality. Campau insisted on the name "Grand Rapids," while Lyon wanted it called "Kent" after a chancellor of New York state. The name of Chancellor Kent, however, is perpetuated in the name of the county. All this is a matter of history.

Butterworth Hospital

Located in the midst of a lumbering district, from the beginning prosperity was assured to the town. Perhaps for more than anything else, Grand Rapids today is preëminently known throughout the nation as the Furniture City of America, just as Detroit is known throughout the world as the great automobile center.

Grand Rapids is characterized by the diversity of its industrial operations, best known of which is furniture manufacturing for which it is known the world over. There are more than 500 manufacturing establishments in the city, producing

more than 2,500 different products which are grouped mainly into woodworking, metalworking and miscellaneous. In the latter group are several large subdivisions including graphic arts, food

St. Mary's Hospital

products, paper products, gypsum mining and products, chemicals and textiles.

The metal industry vies for importance with the woodworking industry. A large number of plants are devoted to producing a wide variety of metal products including woodworking and metalworking machinery; hardware for automobiles, furniture, refrigerators, plumbing and building; automobile bodies and trailers and parts. This industry which employs thousands of men is one of the most rapidly developing industrial groups and is a very important factor in the economic well-being of the community.

Also Grand Rapids contains the largest sticky fly paper factory in the world, the largest producers of school, church and theater seats, carpet sweepers, metal belt lacers, gypsum products, window sash pulleys, paper boxes, automatic musical instruments and plumbing and bathroom fixtures. In order to indicate the versatility of Grand Rapids' manufacturing, a short list of a variety of products made there might prove interesting. Bodies for several nationally known makes of automobiles are built here. Its other contributions to the automotive world include nationally known tires and bumpers, as well as metal dash boards, hardware, refinements for car interiors, seat and back springs, and other parts and minor accessories.

To this list of Grand Rapids-made products may be added leather belting, cigars, mattresses, springs, bedding, flour, paints, varnishes, extracts, perfumes, filing devices, metal furniture and cabinets, underwear, hosiery, clothing, infants' and children's dresses, toilet preparations, factory trucks, factory conveyors, wrought iron products, elevators, emblem jewelry, radiator covers, motor boat propellers, face cream, fibre cord, laminated wood products, soaps and washing powders, ladies' ready-to-wear, crackers, candies, band instruments, golf clubs, golf balls, ski equipment and sporting goods. With attractive advantages to offer, negotiations are constantly being carried on to further extend the manufactories in this community.

Grand Rapids stands high as a printing center. There are some 60 plants in the city, and among them are producers of photoengraving, lithography, printing and very high-grade advertising literature.

The inhabitants of the city number 176,000. There are 2,560 retail establishments, 80 schools, 150 churches, 11 hotels and 27 theaters. Grand

Blodgett Hospital

Rapids is a city with a personality. It is essentially a city of homes, ministered to spiritually and culturally by the number of churches and schools mentioned. The material wants of the inhabitants are supplied by four large departmental stores and scores of small smart shops. It seems scarcely necessary to comment on Grand Rapids as a convention city, since the fact is already known to the medical profession of the state which has met there a number of times and has partaken of the hospitality of the city. The medical profession of Grand Rapids is progressive and equal in ability to that of any city on the continent.

# THE 76TH ANNUAL MEETING

## GRAND RAPIDS — 1941

## CONVENTION INFORMATION

### DIRECTORY

Headquarters and Registration....Civic Auditorium
Telephone: 9-1454 and 9-1475
Hotel Headquarters.....Pantlind Hotel
Scientific and Technical Exhibits..Civic Auditorium
General Assemblies, Black and Silver Ballroom
.....Civic Auditorium
Publicity, Press Room..Room A, Civic Auditorium
Telephone: 9-7201
M.S.M.S. Hospitality Booth.....
Exhibit Floor, Civic Auditorium
Woman's Auxiliary, Headquarters and Registration.....Pantlind Hotel

* * *

**Register—Exhibit Floor,** Civic Auditorium, Grand Rapids—as soon as you arrive.

Hours of Registration daily 8:30 a.m. to 6:00 p.m. on Tuesday, Wednesday and Thursday, September 16, 17, 18, and to 3:30 p.m. on Friday, September 19.

Admission by badge only, to all scientific assemblies and section meetings. Monitors at entrance.

**Bring your M.S.M.S. or A.M.A. Membership Card to expedite registration.**

No registration fee to members of the Michigan State Medical Society.

* * *

**Guests**—Members of the American Medical Association from any state, or from a province of Canada, and physicians of the Army, Navy and U. S. Public Health Service are invited to attend, as guests. Please present credentials at Registration Desk.

Bona fide doctors of medicine serving as interns, residents, or who are associate or probationary members of county medical societies, if vouched for by an M.S.M.S. Councilor or the president or secretary of the county medical society, will be registered as guests. Please present credentials at Registration Desk.

* * *

**Physicians, not members,** if listed in the American Medical Directory, may register as guests upon payment of $5.00. This amount will be credited to them as dues in the Michigan State Medical Society FOR THE BALANCE OF 1941 ONLY, provided they subsequently are accepted as members by their County Medical Society.

* * *

**The Michigan State Medical Society Hospitality Booth** is adjacent to the Registration Desk at the entrance of the Exhibit Hall. An M.S.M.S. Councilor or Officer will be in attendance at all times. Members are invited to stop at the Headquarters and meet the President and other M.S.M.S. officers.

* * *

**Register at Each Booth**—There is something new for you in the interesting and large exhibit (110 booths). Stop and show your appreciation of the exhibitors' support in making the Convention possible.

**Telephone Service**—Local and Long Distance telephone will be available at entrance to Black and Silver Ballroom in the Civic Auditorium, as well as in the Pantlind Hotel.

*In case of Emergency,* doctors will be paged from the meetings by announcement on the screen. Telephone numbers in the lobby of the Black and Silver Ballroom are: 9-1547; 9-1716; 9-1738. The Pantlind Hotel telephone number is: 9-7201.

* * *

**Seven General Assemblies,** Wednesday, Thursday and Friday, September 17, 18, 19.

* * *

**The Seven Section Meetings** will be held on Friday morning only, September 19. Luncheons will be sponsored by the Sections on

1. Obstetrics and Gynecology.
2. Ophthalmology and Otolaryngology.
3. Dermatology and Syphilology.

#### DISCUSSION CONFERENCES

These quiz periods will be held Wednesday and Thursday, September 17 and 18, 3:30 to 4:30 p.m. An opportunity to ask questions or to discuss one of your interesting cases with the guest-essayist will be provided.

Please submit your questions, on forms printed in the program, to the Secretary of the General Assembly immediately after the termination of the lecture, in order that the guest essayist may have time to consider same before the quiz period.

**Public Meeting**—The evening assembly of Wednesday, September 17—President's Night—will be open to the public. Invite your patients and other friends to this interesting meeting. The program (complete on page 726) is highlighted by:

8:00 p.m. President's Address
Induction of President-Elect.
9:00 p.m. Biddle Oration.
10:00 p.m. Entertainment (floor show) and dancing.

* * *

**Checkrooms** are available in the Pantlind Hotel, and in the lobby of the Exhibit Hall, Civic Auditorium.

#### MICHIGAN MEDICAL SERVICE

Second Annual Meeting of the Michigan Medical Service Membership will be held Wednesday, September 17, 4:30 p.m. in the Swiss Room, Pantlind Hotel. Members of Michigan Medical Service are all the members of the M.S.M.S. House of Delegates plus the Director of Michigan Medical Service. The Officers' Reports and Election of Directors will be on the agenda of the Annual Meeting.

## PAPERS WILL BEGIN AND END ON TIME!

Believing there is nothing which makes a scientific meeting more attractive than by-the-clock promptness and regularity, all meetings will open exactly on time, all speakers will be required to begin their papers exactly on time, and to close exactly on time, in accordance with the schedule in the program. All who attend the meeting, therefore, are requested to assist in attaining this end by noting the schedule carefully and being in attendance accordingly. Any member who arrives five minutes late to hear any particular paper will miss exactly five minutes of that paper!

**The Committee Organization Luncheon,** a meeting of M.S.M.S. committee chairmen appointed by President-Elect Carstens to serve during the year 1941-42, will be held on Wednesday, September 17, 1941, 12:30 p.m. in the Furniture Assembly Room, Pantlind Hotel.

* * *

**American Medical Women's Association,** Michigan Branch, will meet Tuesday, September 16, Pantlind Hotel, 1:00 p.m. (luncheon), followed by a business meeting at 2:00 p.m.

At the 6:30 p.m. dinner, Myra Babcock, M.D., Detroit, will speak on "Status of Women Physicians in the National Defense Program," followed by a round-table discussion.

All women physicians are cordially invited to attend this meeting.

**A Special Meeting of M.S.M.S. Delegates** will be held Monday, September 15, 1941 at 8:00 p.m. in the Swiss Room, Pantlind Hotel, Grand Rapids. All M.S.M.S. Delegates and members are invited and urged to attend this session at which the Afflicted-Crippled Child Laws, Medical Welfare, Michigan Medical Service, and other subjects will be discussed.

**The Michigan Branch of the American Academy of Pediatrics** will hold a dinner in the Pantlind Hotel, Thursday evening, September 18, 6:30 p.m. W. C. C. Cole, M.D., 1077 Fisher Building, Detroit, is in charge of arrangements.

* * *

**The Northwestern University Medical School Alumni** luncheon will be held at the Peninsular Club, Grand Rapids, Thursday, September 18, at 12:15 p.m.

All Northwestern Medical School Alumni are cordially invited to attend this luncheon. E. W. Schnoor, M.D., 216 Medical Arts Bldg., Grand Rapids, President of the Northwestern A-1 Club of the host city, is Chairman.

* * *

**Acknowledgment**—The Michigan State Medical Society sincerely thanks the following friends for their sponsorship of lectures at the 1941 meeting:

| *Sponsor* | *Lecturer* |
|---|---|
| Children's Fund of Michigan | Borden S. Veeder, M.D., St. Louis, Mo. |
| W. K. Kellogg Foundation | James R. McCord, M.D., Atlanta, Ga. |
| Michigan Department of Health | Anthony J. Lanza, M.D., New York City. |
| Michigan Tuberculosis Association | Charles E. Lyght, M.D., Northfield, Minn. |

**Essayists are very respectfully** requested not to change time of lecture with another speaker without the approval of the General Assembly. This request is made in order to avoid confusion and disappointment on the part of the audience.

## SMOKER

Thursday, September 18, at 9:00 p.m., Ballroom, Pantlind Hotel. Admission by card to members only.

**Scientific and Technical Exhibits**—110 displays—will open daily at 8:30 a.m. and close at 6:00 p.m. with the exception of Friday, when the Exhibits will close at 3:00 p.m. Intermissions to view the exhibits have been arranged during the morning and afternoon General Assemblies.

**Please Register at Each Booth**

* * *

**Golf Tournament**—Monday, September 15, 1941, beginning at 12:00 Noon at beautiful Kent Country Club. Plan to participate in this 18-hole tournament and win a prize. Competition open to all members of the Michigan State Medical Society. Five Flights, for Beginners, Dubs and Experts. Banquet and presentation of prizes at Kent C. C., 6:30 p.m. The price: $3.00.

* * *

**Parking**—Do not park your car on the street. Convention parking near the Civic Auditorium will be marked off with suitable sidewalk signs. The Grand Rapids Police Department will issue courtesy cards (at Registration Desk) for out-of-town autos, which give parking privileges but do not apply to metered spaces. Nearby parking lots are available, as well as convenient indoor parking facilities. The indoor parking rates at the Pantlind Garage is 50 cents for twenty-four hours. Parking is free for twenty-four hours with one of the following services: (a) car wash; (b) complete lubrication; (c) oil change; (d) purchase of 10 gallons of gasoline.

## COUNTY SECRETARIES' CONFERENCE

**Grill Room** — **Pantlind Hotel**

**Wednesday, September 17, 1941**

**LUNCHEON — 12:00 to 1:30 p.m.**

E. B. Andersen, M.D., Iron Mountain, Presiding.

John M. Pratt

**Program**

1. "What's Going on in Michigan" (10 min.) L. Fernald Foster, M.D., Bay City, Secretary, Michigan State Medical Society.
2. "What's Going on in Washington" (30 min.) John M. Pratt, Chicago, Executive Administrator, National Physicians Committee.

**All Members of the State Society will be Most Welcome at This Conference**

Symposium on

**"THE BUSINESS SIDE OF MEDICINE"**

**Grill Room**

**Pantlind Hotel—Grand Rapids**

**Tuesday, September 16, 1941**

**12:30 to 4:30 p.m.**

*(Subscription Luncheon, 12:30 p.m.)*

STANLEY R. MAUCK

R. G. LELAND, M.D.

**Program**

WILFRID HAUGHEY, M.D., Battle Creek, Presiding

1. Welcome
   HENRY R. CARSTENS, M.D., Detroit, President-Elect, Michigan State Medical Society
2. Michigan Medical Service Billing
   L. FERNALD FOSTER, M.D., Bay City, Member, Board of Directors, MMS.
3. "Better Records in Half the Time"
   JOHN J. WELLS, Detroit, Manager, The Physicians Bookkeeper
4. "Handling the Doctor's Accounts Receivable Problem"
   STANLEY R. MAUCK, Columbus, Ohio, President, National Association Professional Bureau Managers
5. Round-table discussion
   Led by R. G. LELAND, M.D., Chicago, Director, Bureau of Medical Economics, American Medical Association

**Preview of M.S.M.S. Technical Exhibit (4:30 to 5:15 p.m.)**

*This meeting is arranged especially for the secretaries and office assistants of members of the Michigan State Medical Society. Physicians are urged to send their office secretaries to this meeting; the suggestions and ideas offered at this session will more than replay the doctor for doing so. There is no registration fee, only a charge made by the hotel for luncheon.*

**Guest Golf**—The Chairman of the Grand Rapids Committee has arranged that M.S.M.S. members may play at all country clubs in the Grand Rapids District upon presentation of M.S.M.S. Membership Card and payment of greens fees.

**Wm. A. Hyland, M.D.**, Metz Building, Grand Rapids, is General Chairman of the G. R. Committee on Arrangements for the 1941 M.S.M.S. Convention.

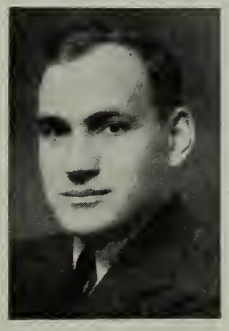
* * *

**Postgraduate Credits** given to every member who attends the M.S.M.S. General Assembly, Wednesday, Thursday, Friday, September 17, 18, 19, at Grand Rapids

* * *

**Press Committee:** J. Duane Miller, M.D., Chairman; Leon DeVel, M.D., and Torrance Reed, M.D.

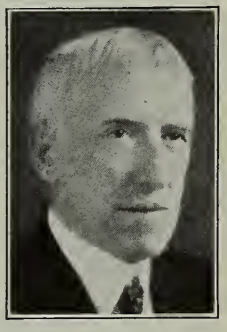
* * *



R. A. BIER, M.D.

**"The Physician in National Defense"** will be the subject of a brief presentation by Robert A. Bier, M.D., Major, Medical Corps, Medical Headquarters for the Selective Service System, Washington, D. C. This ten-minute talk will be given at the Third General Assembly — President's Night — Wednesday, September 17, 8:30 p.m. in the Ballroom of the Pantlind Hotel.

**Andrew P. Biddle, M.D.**, well-known patron of Postgraduate Medical Education in Michigan, will present the Biddle Oration Scroll to Alphonse Schwitalla, S.J., Dean, St. Louis Medical School, September 17, 9:00 p.m., Ballroom, Pantlind Hotel.



A. P. BIDDLE, M.D.

**To the MSMS Convention!**

# SCIENTIFIC EXHIBITS

**I University of Michigan Medical School**

**"Ventriculography"**

This diagnostic procedure requires numerous technically perfect roentgenograms of the skull made in several projections. For this exhibit only the most diagnostic films of each case have been selected and they display deformities of the ventricular system caused by tumors involving all parts of the brain.

**II Wayne University College of Medicine,**

**Department of Medicine**

**in collaboration with the**

**Michigan State Department of Health**

**"Treatment of Pneumococcic Pneumonia"**

This exhibit covers diagnosis, prognosis, general management and specific treatment of pneumococcic pneumonia. Detailed consideration is given to sulfathiazole and serum. Results with sulfathiazole are presented and toxic manifestations are illustrated. Representative cases are included, to show the clinical response to specific treatment and the effect of serum and chemotherapy upon pneumococci in the sputum.

**III W. K. Kellogg Foundation,**

**Battle Creek**

The W. K. Kellogg Foundation scientific exhibit will be a series of colored photographs showing the methods through which the Foundation is assisting in the improvement of medical practice. At present the efforts of the Foundation are confined to the seven counties of Allegan, Barry, Branch, Calhoun, Eaton, Hillsdale, Van Buren. The Foundation is assisting the doctors in three ways: 1. Providing opportunities and fellowships for education. 2. Assisting in the provision of medical facilities—(a) Hospital, (b) X-ray, (c) Clinical Laboratory, (d) Nursing, (e) Consultative, 3. Preventive Medicine. The Foundation provides financial assistance for promoting medical examinations, immunizations, tuberculosis examinations. It also assists in subsidizing health departments which co-operate with the medical society in the development of preventive programs. There are no clinics in this area and the policies and procedures are developed by the county medical society itself.

**IV Michigan Department of Health**
**Lansing, Michigan**

**"Care of Premature Infants"**

The Michigan Department of Health will display equipment for the care of premature infants. The Department's recently developed incubator will be demonstrated together with types of heated beds. Charts will show premature death rates by counties and maps will indicate locations of hospitals to which incubators have been loaned by the Department.

**V Blodgett Hospital**
**Grand Rapids, Michigan**

1. The treatment of burns from the corrective and Plastic Surgery standpoint. This is an exhibit demonstrating the skin grafting of recent burns, and the management of scars, contractures, and deformities resulting from burns.
2. A teaching exhibit for the General Practitioner, showing typical x-ray findings in the more common bone tumors, both benign and malignant—a minimum of reading material.
3. Diabetes Mellitus. An exhibit showing the causes of glycosuria with the differential diagnosis.

**VI Butterworth Hospital**
**Grand Rapids, Michigan**

**"Clinical Analysis of 550 Endometrial Biopsies"**

A clinical analysis of 550 endometrial biopsies is presented by the Department of Gynecology and the Department of Pathology of Butterworth Hospital. While this material represents a study of a variety of gynecological conditions, our interest is chiefly concerned with the clinical analysis of the factors involved in 55 consecutive sterility patients. Endometrial biopsies showed that the dominant sterility factor in 12 patients of this group was due to failure of ovulation. Eight of these anovulatory patients were given injections of mare's serum. Subsequent endometrial biopsies showed evidence of ovulation in all but one patient of the treated group. These results are outlined in case history form and illustrated by photomicrographs.

**VII St. Mary's Hospital**
**Grand Rapids, Michigan**

**"St. Mary's Hospital—a Tribute to the Sisters of Mercy—Pioneer Nurses of Michigan"**

This exhibit will depict a scene in the first Mercy Hospital of Michigan during the early lumbering days. Equipment, costumes and instruments will be on display as used during that period in the care of the sick and injured.

**VIII Medical Superintendents of**
**State Hospitals**

**Demonstration of Neuropathologic Specimens by the Michigan State Hospitals for Mental Disease and the Neuropsychiatric Institute**

Neuropathologic exhibit of about 150 specimens which represent: 1. Gross specimens of the brain showing various organic diseases of particular interest to the physician in general practice. 2. Diagrams illustrating heredity in nervous and mental disorders. 3. Photographs of specimens showing particularly marked pathologic changes. 4. Large brain sections for demonstrations of tumors, gross cerebral atrophy and other conditions of interest.

**IX Michigan Tuberculosis Association**
**Lansing, Michigan**

**"Chest X-ray Methods"**

Exhibit showing comparison of various methods of making chest roentgenograms, in private practice and mass surveys, with brief comments on advantages and disadvantages of each method. The methods included are: Fluoroscope, single 14 x 17 film, stereoscopic films, paper roll, fluorography with 35 mm. film and fluorography with 4 x 5 film. Each method is shown by (a) diagram illustrating the basic physical principles; (b) photograph of the apparatus; (c) actual x-ray; (d) brief comments. The X-ray films and photographs are all of the same case. Across the top of the exhibit are transparencies done in the Isotype technic of the various methods illustrated.

**X U. S. Army**
**Selective Service System**

**"Military Information"**

To aid the members of the medical profession who may attend the State Convention, arrangements have been made to have qualified representatives of the Army Medical Corps and a representative of State Selective Service Headquarters available at the Military Information Booth in the Exhibit Hall during the Convention. Information on commissions in the Medical Department of the Army, Navy and Marine Corps may be obtained from official representatives. Questions concerning examination of selectees may be answered by the official representative of Selective Service.

**XI American Medical Association**
**Chicago, Illinois**

**"Use and Abuse of Barbiturates"**

An exhibit from the Council on Pharmacy and Chemistry consisting of posters showing the use and abuse of the barbiturates; a chart giving the names and chemical formulas of thirty products on the market; an exposition file and New and Nonofficial Remedies giving additional information.

**XII American College of Surgeons**
**Grand Rapids Committee of**
**Regional Fracture Committee**

**"Fracture Exhibit"**

Photographs of fracture films and exhibit of splints, also fracture primers will be shown.

# PROGRAM SYNOPSIS

## MONDAY, SEPTEMBER 15

**12:00 Noon** **M.S.M.S. Golf Tournament**
Kent Country Club, Grand Rapids

**3:00 P.M.** **Meeting of The Council, M.S.M.S.**
Service Club Lounge, Pantlind Hotel

**6:30 P.M.** **Golfers' Banquet and Presentation of Prizes**
Kent Country Club

**8:00 P.M.** **Special Meeting for Delegates and Members**
Swiss Room, Pantlind Hotel

## TUESDAY, SEPTEMBER 16

**8:00 A.M.** **Delegates' Breakfast**
Swiss Room, Pantlind Hotel

**9:00 A.M.** **First Session, House of Delegates**
Grand Ballroom, Pantlind Hotel

**12:30 P.M.** **Symposium on "Business Side of Medicine"**
Grill Room, Pantlind Hotel

**3:00 P.M.** **Second Session, House of Delegates**
Grand Ballroom, Pantlind Hotel

**5:15 P.M.** **Preview of Scientific and Technical Exhibits for members of House of Delegates and M.S.M.S. Officers**
Exhibit Floor, Civic Auditorium

**8:00 P.M.** **Third Session, House of Delegates**
Grand Ballroom, Pantlind Hotel

## WEDNESDAY, SEPTEMBER 17

**8:30 A.M.** **Registration: Exhibits Open**
Exhibit Floor, Civic Auditorium

**9:30 A.M.** **First General Assembly**
Black and Silver Ballroom, Civic Auditorium
(For detailed program see page 723)

**12:00 Noon** **County Secretaries' Conference**
Grill Room, Pantlind Hotel

**12:30 P.M.** **Committee Organization Luncheon**
Furniture Assembly Room, Pantlind Hotel

**1:30 P.M.** **Second General Assembly**
Black and Silver Ballroom, Civic Auditorium
(For detailed program see page 725)

**3:30 P.M.** **Discussion Conferences**
(See Outline, page 724)

**4:30 P.M.** **Second Annual Meeting of Members of Michigan Medical Service**
Swiss Room, Pantlind Hotel

**5:30 P.M.** **Meeting of Board of Directors, Michigan Medical Service**
Room 122, Pantlind Hotel

**8:30 P.M.** **Third General Assembly — PRESIDENT'S NIGHT—PUBLIC MEETING**
Ballroom, Pantlind Hotel
(For detailed program see page 726)

## THURSDAY, SEPTEMBER 18

**8:30 A.M.** **Registration: Exhibits Open**
Exhibit Floor, Civic Auditorium

**9:30 A.M.** **Fourth General Assembly**
Black and Silver Ballroom, Civic Auditorium
(For detailed program see page 726)

**1:30 P.M.** **Fifth General Assembly**
Black and Silver Ballroom, Civic Auditorium
(For detailed program see page 728)

**3:30 P.M.** **Discussion Conferences**
(See Outline, page 724)

**6:30 P.M.** **Fraternity and Alumni Banquets**

**9:00 P.M.** **Sixth General Assembly—SMOKER (For Members Only)**
Ballroom, Pantlind Hotel
(For detailed program see page 728)

## FRIDAY, SEPTEMBER 19

**8:30 A.M.** **Registration: Exhibits Open**
Exhibit Floor, Civic Auditorium

**Meetings of Sections**

**9:00 A.M.** **(1) Section on General Medicine**
Ballroom, Pantlind Hotel
(See page 729)

**8:30 A.M.** **(2) Section on Surgery**
Black and Silver Ballroom, Civic Auditorium
(See page 729)

**9:30 A.M.** **(3) Section on Obstetrics and Gynecology**
Grill Room, Pantlind Hotel
(See page 730)

**(4) Section on Ophthalmology and Otolaryngology**

**9:30 A.M.** **Ophthalmology**
Room F, Civic Auditorium
(See page 730)

**9:00 A.M.** **Otolaryngology**
Room G, Civic Auditorium
(See page 730)

**9:00 A.M.** **(5) Section on Pediatrics**
Swiss Room, Pantlind Hotel
(See page 731)

**9:30 A.M.** **(6) Section on Dermatology and Syphilology**
Directors Room, Civic Auditorium
(See page 731)

**9:30 A.M.** **(7) Section on Radiology, Pathology and Anesthesia**
Red Room, Civic Auditorium
(See page 732)

**1:30 P.M.** **Seventh General Assembly**
Black and Silver Ballroom, Civic Auditorium
(For detailed program see page 733)

**4:30 P.M.** **End of 1941 Convention**

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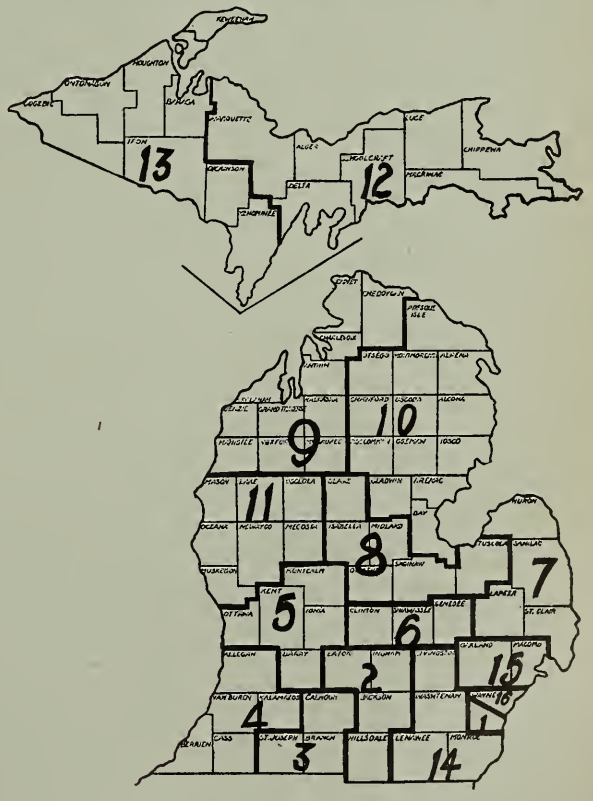
## Councilor Districts of the Michigan State Medical Society



# WOMAN'S AUXILIARY

MRS. R. V. WALKER
President

**GRAND RAPIDS CONVENTION COMMITTEE**

**Mrs. Thomas C. Irwin, Chairman**
**Mrs. A. V. Wenger, Co-Chairman**
**Mrs. Henry J. Vandenberg, Banquet**
**Mrs. Henry J. Pyle, Finance**
**Mrs. George H. Southwick, Flowers**
**Mrs. Merrill M. Wells, Hospitality**
**Mrs. Leon C. Bosch, Printing**
**Mrs. William A. Hyland, Luncheon**
**Mrs. R. S. VanBree, Publicity**
**Mrs. W. D. Lyman, Registration**
**Mrs. Carl F. Snapp, Transportation**

MRS. T. C. IRWIN
Convention Chairman

## OFFICERS, 1940-41

**Mrs. Roger V. Walker, Detroit.....President**
**Mrs. William J. Butler, Grand Rapids.....President-elect**
**Mrs. Oscar D. Stryker, Fremont.....Vice President**
**Mrs. A. O. Brown, Detroit.....Secretary**
**Mrs. H. L. French, Lansing.....Treasurer**
**Mrs. L. G. Christian, Lansing.....Past President**
**Mrs. Guy L. Kiefer, East Lansing.....Honorary President**

## PROGRAM

**Tuesday, September 16, 1941**

**10:00 A.M. Registration—Pantlind Hotel**

**1:00 P.M. Luncheon, Pre-convention Board Meeting—Woman's City Club, 1940-41 Board Members and County Presidents**

**Wednesday, September 17, 1941**

**10:00 A.M. Registration—Pantlind Hotel**

**10:30 A.M. Formal Opening of Convention—Kent Country Club**

Presiding—Mrs. Roger V. Walker, Detroit
Address of Welcome—Mrs. Charles F. Ingersol, Grand Rapids
Response—Mrs. Oscar D. Stryker, Fremont
In Memoriam—Mrs. K. L. Crawford, Kalamazoo
Reading of Minutes—Mrs. A. O. Brown, Detroit
Report of Treasurer—Mrs. H. L. French, Lansing
Auditor's Report—Mrs. H. L. French
Report, Convention Chairman—Mrs. Thomas C. Irwin, Grand Rapids
Credentials and Registration—Mrs. W. D. Lyman, Grand Rapids
Report of Special Committee and President's Message—Mrs. Roger V. Walker
Reports of Standing Committees
Report of Committee on Nominations
Election and Installation of Officers
Presentation of Pin
Courtesy Resolutions
Adjournment

**1:00 P.M. Luncheon at Kent Country Club**

Presiding—Mrs. Thomas C. Irwin
Presiding Officer—Mrs. Roger V. Walker
Reports of County Presidents
Adjournment

**4:00 P.M. Post Convention Board Meeting**

Presiding—Mrs. William J. Butler, Grand Rapids
1941-42—Board Members and County Presidents

**8:30 P.M. President's Night, Michigan State Medical Society, Pantlind Ballroom. Floor show and dancing.**

For M.S.M.S. members, their wives and guests

**Thursday, September 18, 1941**

**6:30 P.M. Reception for National President, Past Presidents of Michigan Auxiliary and Board Members**

**7:00 P.M. Banquet—Swiss Room, Pantlind Hotel**

Presiding—Mrs. Roger V. Walker, Detroit
Chairman—Mrs. Thomas C. Irwin, Grand Rapids
Introduction of Past Presidents
Address—Mrs. R. E. Mosiman, Seattle, Washington, National President, Woman's Auxiliary to A.M.A.
One-act play

# WEDNESDAY MORNING
# September 17, 1941

## *First General Assembly*

**Black and Silver Ballroom—Civic Auditorium**

A. S. Brunk, M.D., Presiding

L. Fernald Foster, M.D., and Roger V. Walker, M.D., Secretaries

**A. M.**

**9:30 "Arthritis—A Curable Disease?"**

Russell L. Cecil, M.D., New York City

Russell L. Cecil

*B.A., Princeton University, 1902; M.D. Medical College of Virginia, 1906; Sc.D., Medical College of Virginia, 1928. Entered Army in June, 1917; served as Director of Laboratories at Camp Upton, N. Y., and Camp Wheeler, Georgia; served at Army Medical School and appointed Head of Commission for Study of Pneumonia by Surgeon General, 1917 to 1919. He is now Professor of Clinical Medicine, Cornell University Medical School; Professor of Medicine, Polyclinic Medical School and Hospital; he also holds several other important appointments. Doctor Cecil has published several works on the subjects of pneumonia, arthritis and rheumatism.*

The curability of arthritis varies with the type. Some of the specific forms, such as gonococcal or meningococcal arthritis, are readily curable by sulphonamide therapy. The arthritis of rheumatic fever usually yields promptly to salicylates, but unfortunately the cardiac injury persists. Subacute infectious arthritis often disappears permanently after a focus of infection has been removed. Rheumatoid arthritis is an extremely difficult disease to cure, though a certain small percentage of these patients do make a permanent and complete recovery. More often the life history of the disease is characterized by "ups and downs," which go on indefinitely, with periods of remission being followed by periods of exacerbation. Gold salts offer more promise of permanent relief in the treatment of rheumatoid arthritis than any other remedy so far described.

Osteo-arthritis is also a chronic persistent ailment which may yield readily to rest and physiotherapy, but has a strong tendency to return when the joints are overused. Gouty arthritis starts with acute attacks from which the patient recovers completely when treated promptly with colchicine. Chronic gouty arthritis does not yield so quickly to remedial agents.

———MSMS———

There are eleven golf courses on any of which it will be possible to arrange for you to play while attending the Annual Meeting of the Michigan State Medical Society, September 17, 18, and 19 at Grand Rapids.

———MSMS———

You will have an opportunity to visit the only furniture museum in the United States (which includes exhibits of original masterpieces, modern creations of master designers and craftsmen and exhibits of the development of the furniture industry of Grand Rapids and furniture manufacturing material and processes) while attending the Annual Meeting of the Michigan State Medical Society, September 17, 18, and 19 at Grand Rapids.

**10:00 "Acute Appendicitis—A Twenty-five Year Study"**

Elliott C. Cutler, M.D., Boston
(Stanley O. Hoerr, M.D., Boston, Associate in Study)

Elliott C. Cutler

*A.B., Harvard, 1909; M.D., Harvard Medical School, 1913; Honorary Doctorate, University of Strasbourg, 1938. Served in World War as Major, Medical Corps; Lt. Colonel, Medical Corps Reserve, since 1924; decorated with Distinguished Service Medal. Chairman, Department of Surgery, and Director of Laboratory of Surgical Research, Harvard, 1922-24; Professor of Surgery, Western Reserve University School of Medicine, 1924-32; Consulting Surgeon, New England Peabody Home for Crippled Children, 1932 to present; Moseley Professor of Surgery, Harvard, 1932 to present; Surgeon-in-Chief, Peter Bent Brigham Hospital. Doctor Cutler is a member of many medical and social organizations.*

The deaths from acute appendicitis occur, as is well known, in patients in whom peritonitis has already developed when they first reach the hospital. Early diagnosis and avoidance of catharsis through education both of the laity and the profession remains as important today as it was twenty-five years ago. Today, however, strict attention to the details of pre-operative and postoperative management, including fluid and electrolyte balance, use of chemotherapy, and gastro-intestinal syphonage is saving lives that would previously have been lost. Hospital morbidity in severe cases is cut down by the general use of the McBurney incision, less frequent drainage of the peritoneal cavity, and partial closure of the wound by leaving the skin open.

**10:30 INTERMISSION TO VIEW THE EXHIBITS**

**11:00 "Serologic Aspects of Syphilis"**

Francis E. Senear, M.D., Chicago

Francis E. Senear

*B.S., University of Michigan, 1912, M.D., 1914. Professor and Head of Department of Dermatology, University of Illinois College of Medicine since 1923. Member of Serologic Evaluation Committee, U. S. Public Health Service, American Medical Association, Chicago Dermatological Society, Society of Investigative Dermatology, the American Academy of Dermatology and Syphilology, the American Dermatological Association.*

The multiplicity of sero-diagnostic tests for syphilis is discussed together with a review of the studies carried out on an international and national scale in an attempt to determine the best available sero-diagnostic methods. The limitations of the diagnostic tests for syphilis are discussed with a consideration of these phases in which the serologic reaction is apt to be negative in the presence of disease and with a consideration of the other disorders which are capable of giving rise to biologic false positive reactions. Methods offered to distinguish between the true syphilitic reaction and the biologic false reaction are considered and their usefulness is discussed. The significance of positive cord blood findings is discussed and the significance of changes in the strength of the reaction of the cord blood are considered. The paradoxical false positive reactions occurring in individuals with no signs of syphilis and with no other disease to account for them are of great significance and are met with sufficient frequency to make their recognition a matter of great importance to the practitioner.

**11:30 "The Medical and Other Implications Which Relate to An Aging Female Population"**

GEORGE W. KOSMAK, M.D., New York City

GEO. W. KOSMAK

*A.B., M.D., Columbia College, 1894. College of Physicians and Surgeons, 1899. Attending Surgeon, Lying-In Hospital of New York, 1904-1926. Editor and founder, American Journal of Obstetrics and Gynecology, 1920 to date, editor of preceding publication, 1909-1919. Member, American Gynecological Society, American Association of Obstetricians and Gynecologists, Diplomate of American Board. Consultant in obstetrics to several hospitals; Federal Children's Bureau, New York State Department of Health, etc. Author of book, "Toxemias of Pregnancy" (1933), and of numerous articles in medical and lay journals on obstetric topics.*

It is an acknowledged fact that the average span of life has increased from about thirty-six years in 1850 to over sixty years in 1930 and will probably reach seventy years or more in 1960. The possible causes for this will be discussed and attention called to the associated medical and social problems. Undoubtedly better economic conditions, reduced hazards to life from improved sanitation, the lessening complications of child-bearing, and increased medical knowledge have constituted important contributing factors. We are faced, however, with the question of dependence by the older upon the younger groups and by the need of a closer study of the degenerative diseases which are manifest in the aged. Society and medicine must combine to study and to solve these problems.

**12:00 "The Needs and Possibilities of Research in Mental Disease"**

LAWRENCE KOLB, M.D., Washington

LAWRENCE KOLB

*M.D., University of Maryland, 1908. Assistant Surgeon General, U. S. Public Health Service, Washington, D. C., in charge of the Division of Mental Hygiene. Fellow, American College of Physicians, American Medical Association, and American Psychiatric Association. Member, National Committee for Mental Hygiene, American Association for the Advancement of Science, Research Council on Problems of Alcohol, Academy of Medicine of Washington, D. C., American Prison Association, Southern Medical Association, Medical Society of St. Elizabeth's Hospital, Kentucky Psychiatric Association. Trustee, William Alanson White Psychiatric Foundation.*

Recent advances in medical knowledge suggest lines of approach to the study of the fundamental basis of mental disease. These studies should include biology, biochemistry, neurophysiology, pathology, endocrinology, morphology, psychology, etc., as these subjects may have a bearing on mental disease. Such studies should be supplemented by extensive field studies into the social and environmental factors. Close coöperation between the Federal and State governments and agencies in a position to carry on research is needed to reap the fullest benefit from available resources.

**P. M.**

**12:30 End of First General Assembly**

**12:30 Luncheon**

# *Eleven Discussion Conferences (Quiz Periods)*

Eleven discussion conferences with a different chairman in each subject—leaders of outstanding ability in their specialty. Here the doctor will have a chance to ask those questions which have bothered him and to hear discussed and answered other questions of value to him in his daily practice.

**September 17—3:30 to 4:30 p.m.**

| MEDICINE | OBSTETRICS AND GYNECOLOGY | PEDIATRICS | SURGERY | SYPHILOLOGY | ANESTHESIA |
|---|---|---|---|---|---|
| Ballroom, Pantlind Hotel | Grill Room, Pantlind Hotel | Red Room, Civic Auditorium | Black and Silver Ballroom, Civic Auditorium | Room "F," Civic Auditorium | Room "G," Civic Auditorium |
| Leader: E. D. SPALDING, M.D. Detroit | Leader: W. F. SEELEY, M.D. Detroit | Leader: C. F. MCKHANN, M.D. Ann Arbor | Leader: F. A. COLLER, M.D. Ann Arbor | Leader: R. C. JAMIESON, M.D. Detroit | Leader: F. J. MURPHY, M.D. Detroit |
| Guest Conferees: R. L. CECIL, M.D. New York City L. KOLB, M.D. Washington, D. C. | Guest Conferee: GEORGE KOSMAK, M.D. New York City | Guest Conferee: HENRY PONCHER, M.D. Chicago | Guest Conferees: E. C. CUTLER, M.D. Boston A. J. LANZA, M.D. New York City | Guest Conferee: F. E. SENEAR, M.D. Chicago | Guest Conferee: WESLEY BOURNE, M.D. Montreal |

**September 18—3:30 to 4:30 p.m.**

| MEDICINE | OBSTETRICS AND GYNECOLOGY | PEDIATRICS | OPHTHALMOLOGY | PATHOLOGY | |
|---|---|---|---|---|---|
| Ballroom, Pantlind Hotel | Grill Room, Pantlind Hotel | Red Room, Civic Auditorium | Black and Silver Ballroom, Civic Auditorium | Room "F," Civic Auditorium | Join in These |
| Leader: C. C. STURGIS, M.D. Ann Arbor | Leader: N. F. MILLER, M.D. Ann Arbor | Leader: J. L. WILSON, M.D. Detroit | Leader: PARKER HEATH, M.D. Detroit | Leader: OSBORNE A. BRINES, M.D. Detroit | **Quiz Periods** with the **Guest Essayists** |
| Guest Conferees: C. E. LYGHT, M.D. Northfield, Minn. V. P. SYDENSTRICKER, M.D. Atlanta, Ga. C. S. KEEFER, M.D. Boston | Guest Conferees: J. R. MCCORD, M.D. Atlanta, Ga. W. F. MENGERT, M.D. Iowa City, Iowa | Guest Conferee: JAMES GAMBLE, M.D. Boston | Guest Conferee: ALFRED COWAN, M.D. Philadelphia | Guest Conferee: SHIELDS WARREN, M.D. Boston | |

**All Members Are Invited to Participate**

# WEDNESDAY AFTERNOON
## September 17, 1941

### *Second General Assembly*

**Black and Silver Ballroom—Civic Auditorium**

VERNOR M. MOORE, M.D., Presiding
L. FERNALD FOSTER, M.D., and ROBERT G. LAIRD, M.D., Secretaries

**P. M.**
**1:30 "*De Officiis* in Anesthesia"**

WESLEY BOURNE, M.D., Montreal

WESLEY BOURNE

*M.D., C.M., McGill University, 1911; M.Sc., McGill, 1924; F.R.C.P., Canada, 1931; D.A. (R.C.P. & S. Eng.), 1938. First Hickman Medallist, Roy. Soc. of Medicine, 1935. Lieutenant-Colonel, R.C.A.M.C. Lecturer (Anesthesia) Department of Pharmacology, McGill University. Author of many publications on anesthesia. Member of the American Society for Pharmacology and Experimental Therapeutics.*

Although duties prescribed by justice are to be given precedence, and nothing ought to be more sacred, yet in the pursuit of knowledge, we should feel obliged to apply our wisdom to the service of humanity. We ought to consider ourselves bound to teach and train those who are desirous of learning. In such manner the benefits of anesthesia may be extended to those with whom we are united by the bonds of society. With increasing concerted effort, by coöperation between the laboratory worker and the clinician, anesthesia has improved, and the public is recognizing the need and importance of good anesthesia.

**2:00 "Medical Service in Small Industries"**
A. J. LANZA, M.D., New York City

A. J. LANZA

*M.D., George Washington University Medical School, 1906. Served in the United States Public Health Service from 1907 until 1920. During part of this time was detailed as Chief Surgeon of the United States Bureau of Mines, and later, Head of the Office of Occupational Diseases in the Public Health Service. Mostly engaged in Field work doing investigations in industrial hygiene. Conducted the first studies in this country on silicosis. 1920 became Medical Director of the Hydraulic Steel Company of Cleveland. In 1921 was appointed a special Staff member of the International Health Board of the Rockefeller Foundation, and was detailed as Adviser in industrial hygiene for the Commonwealth Government of Australia. In 1926 was appointed Assistant Medical Director of the Metropolitan Life Insurance Company. At present time is a member of the Council of the American Medical Association on Industrial Health. Member of the Sub-committee on Industrial Health of the Health and Medical Committee, Federal Security Agency. Chairman of the Medical Committee of the Air Hygiene Foundation.*

The great bulk of all wage earners are employed in small plants, and 97 per cent of all manufacturing plants employ fewer than 250 men. The problem of providing adequate medical and health service for American wage earners is, therefore, essentially a problem of devising a program that will fit the small industry. While occupational diseases are a definite factor in the industrial health situation, the loss in working days is due to non-occupational hazards. The American Medical Association, State Medical Societies and other Medical Organizations, are taking cognizance of this problem, as well as official agencies, like the Public Health Service, and non-official agencies, such as the Air Hygiene Foundation. It is obvious that health and medical service in these small plants, where the majority of American workmen are employed, will be given by local physicians serving industry on a part-time basis. Here is an opportunity, and the responsibility of the medical profession. The difference between medical service in a small plant and in a large one should be a difference in quantity only, and not in quality. Then, if only a small reduction can be made in absences in industry, it will nevertheless accompany a great economic saving and be a contribution of inestimable value with the production problem that faces American industry at the present time.

**ACKNOWLEDGMENT: The Michigan Department of Health is sincerely thanked for its sponsorship of this lecture.**

**2:30 INTERMISSION TO VIEW THE EXHIBITS**

**3:00 "Hemorrhage in the Newborn"**

HENRY PONCHER, M.D., Chicago

HENRY PONCHER

*M.D., University of Michigan, 1927, Associate Professor of Pediatrics, College of Medicine, University of Illinois, Attending Physician, Cook County Hospital, Physician in charge of Pediatric Service, Research and Educational Hospitals of Illinois. Licentiate of American Board of Pediatrics.*

The newborn may potentially hemorrhage from a variety of causes. Practically, however, trauma alone or minimal trauma in the presence of a disturbed clotting mechanism are the ones that the practicing physician encounters most commonly in his daily work. The minimizing of the traumatic factor alone is outside the scope of this presentation. The part that disturbed coagulability of the blood plays in conditioning hemorrhage of traumatic origin or giving rise to spontaneous bleeding will be discussed. The recent work on prothrombin and vitamin K will be reviewed from the standpoint of its practical implications.

**3:30 DISCUSSION CONFERENCES WITH GUEST ESSAYISTS.** **(See Page 724.)**

**5:00 End of Second General Assembly**

—————MSMS—————

You will find every meeting held at the same building, which has a seating capacity of 5,700 in its main auditorium besides numerous smaller rooms, while attending the Annual Meeting of the Michigan State Medical Society, September 17, 18, and 19 at Grand Rapids.

—————MSMS—————

The President's Night will be a gala affair. Nationally known speakers and a complete program of outstanding entertainers await you at the Annual Meeting of the Michigan State Medical Society, September 17, 18, and 19 at Grand Rapids.

# WEDNESDAY EVENING
# September 17, 1941

## *Third General Assembly*

**—Public Meeting—**
**Ballroom, Pantlind Hotel**

PAUL R. URMSTON, M.D., Presiding
L. FERNALD FOSTER, M.D., Secretary

**PRESIDENT'S NIGHT**
**8:30 P.M.**

1. **Call to order by President Paul R. Urmston, M.D.**
2. **Announcements and Reports of the House of Delegates, by Secretary L. Fernald Foster, M.D., Bay City**
3. **"The Physician in National Defense"**
   ROBERT A. BIER, Major, Medical Corps, National Headquarters, Selective Service System, Washington, D. C.
4. **President's Annual Address—Paul R. Urmston, M.D., Bay City**
5. **Presentation of Scroll and Past President's Key to Doctor Urmston by A. S. Brunk, M.D., Chairman of The Council**
6. **Induction of Henry R. Carstens, M.D., Detroit, into office as President of the Michigan State Medical Society.**
   **Response.**
7. **Introduction of the President-Elect and other newly elected officers of the State Society.**

**9:00 P.M.**

8. **The Andrew P. Biddle Oration:**
   **"The Code of Medical Ethics"**
   ALPHONSE SCHWITALLA, S.J., St. Louis, Mo.

A. SCHWITALLA, S.J.

*A.M., St. Louis University, 1908; Ph.D., Johns Hopkins University (Zoology), 1921; LL.D., Tulane University, New Orleans, 1938; Sc.D., Lawrence College, 1939. Dean, St. Louis University School of Medicine; Regent, St. Louis University School of Nursing and School of Dentistry; President, Catholic Hospital Association of U. S. and Canada; Professor of Biology and Director of the Department, St. Louis University; Past President, North Central Association of Colleges and Secondary Schools; Editor of HOSPITAL PROGRESS; Associate Fellow, American Medical Association.*

The code of medical ethics has recently been the object of attack from various sources. During the trial of the American Medical Association, its provisions were subjected to criticism and in the case of at least one witness, to ridicule. It was repeatedly suggested that the code was in practice merely a figment to be used as a cloak for covering the physician's self-interests. The differentiation between a profession and a trade in so far as that differentiation rests upon the idealism and the exactions of a code of ethics, has been seriously called into question. For this reason, the origin, the provisions, the philosophy and the applications of the code of medical ethics deserve special study and attention not only by the public but also by physicians so that the latter may be able more fully to penetrate into the basis upon which rest their claims to professional standing and so that the validity of the concept of a profession might be more emphatically reaffirmed.

9. **Presentation of Biddle Oration Scroll**

**10:00 P.M.**
**Entertainment and Dancing**

# THURSDAY MORNING
# September 18, 1941

## *Fourth General Assembly*

**Black and Silver Ballroom—Civic Auditorium**

C. E. UMPHREY, M.D., Presiding,
L. FERNALD FOSTER, M.D., and GORDON B. MYERS, M.D., Secretaries

**A. M.**

**9:30 "Some Obstetric Opinions"**

JAMES R. MCCORD, M.D., Atlanta

JAMES R. MCCORD

*M.D., Jefferson Medical College, 1909; Professor of Obstetrics and Gynecology, Emory School of Medicine; Diplomate American Board of Obstetrics and Gynecology.*

The paper is, in the main, an expression of the author's own personal philosophy of obstetrics and a brief discussion concerning the management of quite a few obstetric difficulties. Practically all of the opinions are personal and have as their background Dr. McCord's vast obstetric experience.

**ACKNOWLEDGMENT: The W. K. Kellogg Foundation is sincerely thanked for its sponsorship of this lecture.**

**10:00 "Some Educational Aspects of Diagnosing Tuberculosis Early"**

CHARLES E. LYGHT, M.D., Northfield, Minn.

CHARLES E. LYGHT

*M.D., C.M., Queen's University Faculty of Medicine, (Canada), 1926. Department of Student Health, University of Wisconsin, Madison, 1927-36; Director, 1932-36; Associate Professor of Clinical Medicine, University of Wisconsin Medical School. Professor of Health and Physical Education, and Director of the Student Health Service, Carleton College, Northfield, Minnesota, 1936 to date. Staff of Northfield City Hospital and Allen Memorial Infirmary. Fellow of the American College of Physicians. Member of several professional and scientific societies, including the Minnesota Trudeau Medical Society and Sigma Xi. Past President of the North Central Section, American Student Health Association, and, since 1936, Chairman of the Tuberculosis Committee, A.S.H.A. Publications, in addition to a weekly column: "Lyght on Health," have been mainly in the fields of clinical medicine, tuberculosis control and student health.*

Prognosis in tuberculosis depends on a combination of factors, chief favorable one being early diagnosis. Mass search has produced startling results in driving tuberculosis from first down to seventh among death causes. Individual practitioners must not decide that modern methods work only in community surveys or are the implements of specialists. Nor must we strengthen techniques only during periodic national emergencies. Tuberculin test, x-ray, with painstaking clinical, laboratory and epidemiological follow-up of patients and contacts are available to every physician. To wait for consumptive symptoms or to rely primarily on the stethescope is to diagnose late—inexcusable in the light of common knowledge and professional obligation.

**ACKNOWLEDGMENT: The Michigan Tuberculosis Association is sincerely thanked for its sponsorship of this lecture.**

**10:30 INTERMISSION TO VIEW THE EXHIBITS**

**11:00 "Factors in Deficiency Disease"**

V. P. Sydenstricker, M.D., Augusta, Ga.

*M.D., Johns Hopkins, 1915. Intern and assistant resident physician, Johns Hopkins Hospital, 1915-17. Medical Corps, U. S. Army, 1917-19. Professor of Medicine, University of Georgia School of Medicine, 1923 to present.*

The background of clinical avitaminoses will be discussed from the standpoint of dietary inadequacy and also of conditioning disorders in individuals taking apparently adequate diets. Various clinical patterns of deficiency diseases will be presented with particular reference to the more common but often unrecognized syndromes. The rationale of treatment of both the acute and chronic deficiency diseases will be considered, with particular emphasis on the importance of multiple vitamin therapy.

**11:30 "Pathogenesis of Acidosis and Alkalosis"**

James L. Gamble, M.D., Boston

James L. Gamble

*A.B., Leland Stanford University, 1906, M.D., Harvard Medical School, 1910, S. M. (hon.) Yale University, 1930. Teaching and investigation in Department of Pediatrics, The Harvard Medical School (1915-22). Professor of Pediatrics, 1930 to date. Member American Pediatric Society, American Academy of Pediatrics, Association of American Physicians, American Society of Biological Chemists.*

Stability of the reaction of extracellular fluid depends on preservation of the normal values for carbonic acid and bicarbonate. Acidosis, or alkalosis, is almost always the result of change in bicarbonate rather than carbonic acid. Change in bicarbonate is always the result of change in other parts of the electrolyte structure. Illustration of such change caused by various conditions of disease is presented. The very frequent presence of volume change (dehydration) along with change in reaction is emphasized.

———MSMS———

When you attend the Section on Dermatology and Syphilology which meets Friday morning, September 19, in connection with the Annual Meeting of the Michigan State Medical Society, Carroll S. Wright, M.D., of Philadelphia, will tell you of some of the spectacular results which can be obtained in some skin diseases by judicious administration of the various factors of Vitamin B.

———MSMS———

The hotels will make every effort to care for you satisfactorily when you come to the Annual Meeting of the Michigan State Medical Society, September 17, 18, and 19 at Grand Rapids.

———MSMS———

A metropolitan population of 209,535 welcomes you to the Annual Meeting of the Michigan State Medical Society, September 17, 18, and 19 at Grand Rapids.

**P. M.**

**12:00 "THE DIAGNOSIS AND TREATMENT OF PLACENTA PREVIA"**

William F. Mengert, M.D., Iowa City, Iowa

Wm. F. Mengert

*M.D., Johns Hopkins Medical School, 1927; Diplomate, National Board of Medical Examiners, 1928; Rotating Intern, University of Iowa Hospitals, 1927-28; successively, departmental intern (1 yr.), assistant (1 yr) and instructor (2 yrs.) in the Department of Obstetrics and Gynecology, University of Iowa, 1928-32. Fellow in Gynecologic Research, Gynecean Hospital Institute of Gynecologic Research, University of Pennsylvania, 1932-34; Assistant Professor of Obstetrics and Gynecology, University of Iowa, 1934-38; Associate Professor from 1938 to date. Associate Obstetrician and Gynecologist to the University Hospitals since 1934. Diplomate of the American Board of Obstetrics and Gynecology 1933. Member and officer of numerous medical organizations as well as fraternal and social groups. Author of several medical articles.*

The incidence of placenta previa among 14,569 deliveries at the University of Iowa was 1 : 198. Sterile vaginal examination represents the only *certain* method of diagnosis. Bladder cystograms are a diagnostic aid, and their technique is discussed. Institution of some method of delivery should generally follow the establishment of the diagnosis. The choice of the method varies, but manual dilation of the cervix has no place in the treatment. Vaginal packing and Braxton Hicks version should be employed only when other facilities are not available. The fetal mortality rate is always high, but the mother can usually be saved by prompt, energetic and appropriate treatment, of which the most important single factor is blood transfusion.

**12:30 End of Fourth General Assembly**

**12:30 Luncheon**

———MSMS———

## WHAT'S THEIR HURRY?

They're rushing to the MSMS Convention "Smoker," Thursday evening, September 18, Ballroom, Pantlind Hotel, Grand Rapids.

# THURSDAY AFTERNOON
## September 18, 1941

## *Fifth General Assembly*

**Black and Silver Ballroom—Civic Auditorium**

WILFRID HAUGHEY, M.D., Presiding
L. FERNALD FOSTER, M.D., and FRANK MURPHY, M.D., Secretaries

**P. M.**

**1:30 "Some Observations on the Use of Glasses"**
ALFRED COWAN, M.D., Philadelphia

ALFRED COWAN

*M.D., Medico Chirurgical College, Philadelphia, 1907. At present Professor of Ophthalmic Optics, Graduate School of Medicine, University of Pennsylvania; Ophthalmologist to Philadelphia General Hospital; Supervising Opthalmologist, Department of Public Assistance, Commonwealth of Pennsylvania; Consulting Ophthalmologist, Council for the Blind, Commonwealth of Pennsylvania; Ophthalmologist to Pennsylvania Working Home for Blind Men, Philadelphia; Author of "An Introductory Course in Ophthalmic Optics" and of "Refraction of the Eye," and a number of articles on ophthalmological subjects; a member of the American Ophthalmological Society; American Academy of Ophthalmology and Otolaryngology; College of Physicians, Philadelphia, and others.*

This presentation is offered with the hope that it will suggest to the general physician a simple way of describing certain physiologic optical principles to their patients—the purposes for which glasses are used, when they should be worn and when they are not worthwhile.

The normal eye is an image-forming optical instrument with a remarkable range of adaptability. Clear, comfortable vision depends primarily on a sharp image which must be formed exactly on the surface of the retina without undue effort of accommodation. In a refractive error—myopia, hypermetropia, astigmatism—the correct lens, when placed before the eye, changes the final direction of the rays of light so that on entering the eye they will be imaged on the retina. This is equivalent to placing an object at the exact position for which the eye is adapted.

A refractive error is not a disease, nor can it be produced by working under unfavorable conditions. Every person must eventually become presbyopic.

**2:00 "The Response of Tumors to Radiation"**

SHIELDS WARREN, M.D., Boston

SHIELDS WARREN

*B.S., Boston University; M.D., Harvard Medical School, 1923; Assistant Professor of Pathology, Harvard Medical School 1936 to date; Director, Massachusetts State Tumor Diagnosis Service, 1928 to date; Pathologist to New England Deaconess Hospital, 1927 to date, C. P. Huntington Memorial Hospital, 1928 to date, New England Baptist Hospital, 1928 to date, Pondville State Hospital, 1928 to date; Chairman, Cancer Committee, Massachusetts Medical Society; Vice President, American Association for Cancer Research.*

The response of tumors to radiation is based on the sensitivity of the type cell, the character of the supporting tissues, and the effect on the normal issues of the host. Depending on their response to radiation tumors may be classed as radio-sensitive, radio-responsive, and radio-resistant. Radio-resistance may be acquired following radiation therapy.

The tissue reactions for a given dose are fairly constant and characteristic regardless of minor variations in wave length. Recently irradiated tissue is very susceptible to infection.

**2:30 INTERMISSION TO VIEW THE EXHIBITS**

**3:00 "Recent Advances in Chemotherapy of Infectious Diseases"**
CHESTER S. KEEFER, M.D., Boston

CHESTER S. KEEFER

*M.D., Johns Hopkins University School of Medicine, 1922; Director, Evans Memorial, Massachusetts Memorial Hospitals; Wade Professor of Medicine, Boston University School of Medicine; Diplomate, American Board Internal Medicine.*

The treatment of infectious diseases with the sulfonamide group has advanced remarkably in the past few years. New compounds are being developed and tested every year so that there are at least five effective agents available at present. Each one of these sulfonamide derivatives has its special field of usefulness, and will be discussed in this paper. One recent study with sulfadiazine and sulfaguanidine will be presented. In addition to the discussion of the sulfonamides, our experience in the treatment of local infections with "gramicidin," the extract of a soil bacillus, will be reviewed.

**3:30 DISCUSSION CONFERENCES WITH GUEST ESSAYISTS.** **(See Page 724.)**

**5:00 End of Fifth General Assembly**

———MSMS———

# THURSDAY EVENING
## September 18, 1941

## *Sixth General Assembly*

**(For M.S.M.S. Members Only)**

**Ballroom, Pantlind Hotel**

GROVER C. PENBERTHY, M.D., Detroit, Presiding
L. FERNALD FOSTER, M.D., Secretary

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**SMOKER**

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***Admission by Card Only***

**Nine O'Clock**

**Refreshments**

**Music and Entertainment**

**Host: The Michigan State Medical Society**

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## — PROGRAM of SECTIONS —

# FRIDAY MORNING

# September 19, 1941

### SECTION ON GENERAL MEDICINE

Chairman: T. I. Bauer, M.D., Lansing
Secretary: Gordon B. Myers, M.D., Detroit

**Ballroom—Pantlind Hotel**

**A. M.**

**9:00** **"The Differential Diagnosis of Abdominal Pain"**

Milton R. Weed, M.D., Detroit

**9:30** **"The Differentiation Between Malignant and Benign Ulcerating Lesions of the Stomach"**

H. M. Pollard, M.D., Ann Arbor
Wm. C. Scott, M.D., Ann Arbor

**10:00** **"Problems in the Differential Diagnosis of Coronary Artery Disease"**

A. R. Barnes, M.D., Rochester, Minnesota

A. R. Barnes

*M.D., Indiana University School of Medicine, 1919; Professor of Medicine, Mayo Foundation for Medical Education and Research, University of Minnesota, and Chief of a Section in Medicine, The Mayo Clinic, Rochester, Minnesota; Diplomate, American Board of Internal Medicine.*

So much has been said and written on the subject of coronary sclerosis that there is some evidence of a tendency to make the diagnosis more frequently than the facts warrant. Unfortunately, the syndrome of angina pectoris is a diagnosis that has to be made on the basis of the patient's symptoms and much skill and experience is required in arriving at the diagnosis. There is a tendency to allow the electro-cardiogram to influence this diagnosis, unduly. There are other clinical conditions, such as pericarditis, pulmonary embolism, cholecystic disease and diaphragmatic hernia, which may simulate the pain of coronary artery disease very closely. This discussion will concern itself with the essential clinical features of coronary disease and its differential diagnosis from the clinical conditions mentioned.

**10:30** **"Clinical Use of the Diuretics"**

Richard H. Lyons, M.D., Eloise

**11:00** **"Treatment of Pyelonephritis"**

Muir Clapper, M.D., Detroit

**11:30** **"Useful Drugs in the Treatment of Asthma"**

John M. Sheldon, M.D., Ann Arbor

**12:00** **Election of Officers**

### SECTION ON SURGERY

Chairman: O. H. Gillett, M.D., Grand Rapids
Secretary: Roger V. Walker, M.D., Detroit

**Black and Silver Ballroom—Civic Auditorium**

**8:30 A. M.**

**SYMPOSIUM ON TRAUMATIC SURGERY**

**"Management of Skull Fractures"**

Harry E. Mock, M.D., Chicago

Harry E. Mock

*M.D., Rush Medical College, 1906. Associate Professor of Surgery Northwestern University Medical School; Senior Surgeon St. Lukes Hospital, Chicago; Fellow American Board of Surgery, American College of Surgeons; Chicago Surgical Society; Chicago Institute of Medicine; American Association of Surgery of Trauma, and others. Author of many surgical subjects. Exhibitor in the Scientific Exhibits of the American Medical Association from 1931 to 1938 on the subject of Skull Fractures and Craniocerebral Injuries.*

Craniocerebral injuries in the United States occur to the extent of more than half a million victims a year. Approximately 65 per cent of the deaths resulting from skull fractures occur in the first twenty-four hours following the injury. The widespread distribution and the early occurence of death will always make this a problem for the general physician and surgeon. The author collected and analyzed 3,300 cases of consecutive proved skull fractures from 1929 through 1934. The mortality rate varied from 25 per cent to 49 per cent during that period. The last ten years has brought forth abundant teaching of better management. Has it reduced the mortality rate? Is there room for still further improvement? These and other questions are answered in the author's second nation-wide survey of 3,200 consecutive proved skull fractures.

**"Lacerations of the Head and Face"**

Ferris N. Smith, M.D., Grand Rapids

**"Choice of Anesthesia in Emergency Surgery"**

Wesley Bourne, M.D., Montreal

*(Biography on Page 725)*

The general principles of anesthesia are not affected by the circumstances of emergency, yet the individual may frequently be most urgently in need of the best attention known to anesthesia. Whatever is done should suit the general condition as well as the surgical requirements of the case. When shock is present, there must be the greatest circumspection and the least possible interference until the circulation is improved. The relative advantages of the drugs and the methods of their administration are discussed under the groupings of regional and general anesthesia, showing the appropriate places of local infiltration, of nerve block and of spinal anesthesia, and too, those for inhalation and intravenous anesthesia.

**"Early Care of Compound Fractures"**

Carl E. Badgley, M.D., Ann Arbor

**"Management of Abdominal Injuries"**

Owen H. Wangensteen, M.D., Minneapolis

*(Biography on Page 734.)*

World War Number Two has focused attention upon the subject of trauma sharply again. Whereas the mortality of abdominal injuries in war has always been high, statistically, the incidence of abdominal injuries, as compared with the more frequent injuries of extremities and head, has not been great. World War Number One settled, once and for all, the importance of early closure of perforating wounds of the hollow abdominal viscera. Theretofore, the conservative management of bullet wounds of the intestine had been advocated by many military surgeons.

Despite general acceptance of early operative treatment, the mortality still continues high, because of the serious threat to life, occasioned by spillage of intestinal content into the peritoneal cavity.

In civil practice, one of the greatest difficulties is determination of whether or not blunt trauma has ruptured a hollow viscus. Tears in solid viscera, such as liver or spleen, may be treated conservatively, if hemorrhage is not alarming. Bleeding stops frequently spontaneously. Ruptures of hollow viscera must be closed if the patient is to have a chance of survival.

**"Treatment of Shock from War Injuries"**

HENRY N. HARKINS, M.D., Detroit

**Election of Officers**

———MSMS———

## SECTION ON OBSTETRICS AND GYNECOLOGY

Chairman: CLAIR E. FOLSOME, M.D., Ann Arbor
Secretary: ROBERT S. KENNEDY, M.D., Detroit

**Grill Room—Pantlind Hotel**

**A. M.**

**9:30 "Facilities and Practices in Licensed Maternity Hospital and Maternity Homes in Michigan"**

ALEXANDER M. CAMPBELL, M.D., Grand Rapids

**9:50 "The Use and Abuse of Stilbesterol in Gynecologic Practice"**

ALLAN C. BARNES, M.D., Ann Arbor

**10:10 "Review of Certain Criteria Possibly Useful in the Differential Diagnosis of the Toxemias of Pregnancy"**

PALMER E. SUTTON, M.D., Royal Oak

**10:30 "The Dangers of Breech Delivery"**

WARD F. SEELEY, M.D., Detroit
R. S. SIDDALL, M.D., Detroit

**11:00 "Therapy of the Estrogens"**

RICHARD W. TELINDE, M.D., Baltimore

RICHARD W. TELINDE

*A.B., University of Wisconsin, 1917, M.D., Johns Hopkins University, 1920. Professor of Gynecology, Johns Hopkins University. Chief Gynecologist, Johns Hopkins Hospital. Visiting Gynecologist, Union Memorial Hospital, Church Home and Infirmary and Hospital for Women of Maryland.*

Attention is called to the many abuses in endocrine therapy in general and a warning is given to use hormones only when there is a sound physiological basis for treatment. The results at the author's clinic in the treatment of certain conditions in which he has had special experience are considered. The technique of the treatment of gonococcal vaginitis with estrogenic suppositories, both natural and synthetic, is discussed. The treatment of menopausal symptoms by the natural hormones and stilbestrol is considered. Finally, a new technique for the administration of pellets of crystalline estrone for prolonged relief of menopausal symptoms is given in detail.

**11:30 Election of Officers**

**12:00 Luncheon**

## SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

Chairman: ROBERT H. FRASER, M.D., Battle Creek
Vice Chairman: A. S. BARR, M.D., Ann Arbor
Secretary: ROBERT G. LAIRD, M.D., Grand Rapids
Vice Secretary: ARTHUR E. HAMMOND, M.D., Detroit

### OPHTHALMOLOGY

**Room "F"—Civic Auditorium**

**A. M.**

**9:30 "Uveitis"**

ALFRED COWAN, M.D., Philadelphia
*(Biography on Page 728)*

The various parts of the uveal tract are so intimately related that hardly, if ever, is any one part affected without involvement of all or nearly all of the whole tract. More and more, since the general use of the slit lamp and corneal microscope, is this observed; so much so that specific diagnoses as iritis, cyclitis, or irido cyclitis are seldom well justified. The first evidence of any insult to the iris or ciliary body is a disturbance of the pigment. Often we see evidence of uveal change, especially disturbance of the pigment, which is hard to classify as either a noninflammatory degenerative process or a low grade, chronic uveitis. The etiologic factors in these cases are nearly always baffling. So frequently do we see such conditions that it is felt that many which are diagnosed as primary glaucoma are in reality cases of uveitis with secondary glaucoma.

**10:10 Discussion—20 Minutes**

**10:30 "Dendritic Keratitis"**

JOHN O. WETZEL, M.D., Lansing

**10:50 Discussion—10 Minutes**

**11:00 "Management of Traumatic Injuries to the Eyelids and Globe"**

GORDON L. WITTER, M.D., Port Huron

**11:20 Discussion—10 Minutes**

**11:30 "Chemical Injuries"**

MELVIN H. PIKE, M.D., Midland

**11:50 Discussion—10 Minutes**

**12:00 "Some Uses of Chemotherapy in Ophthalmology"**

PARKER HEATH, M.D., Detroit

**P. M.**

**12:20 Discussion—10 Minutes**

### OTOLARYNGOLOGY

**Room "G"—Civic Auditorium**

**A. M.**

**9:00 "Mistakes Made in the Diagnosis and Estimation of Deafness"**

D. E. S. WISHART, M.D., Toronto, Ontario
*(Biography on Page 733)*

There were universally accepted routine hearing tests. At present there is no universally accepted routine hearing examination.

The old tests were unreliable. The new tests are still unreliable.

Tuning forks are relatively inexpensive. How they

can still be used to give accurate information—but the amount given is very limited.

Audiometers—the new electrical instruments—are not standardized and are still unreliable.

Common errors in audiometry. What information can be obtained by the use of audiometers?

The audiometer has shown how inaccurate hearing testing has been and is.

The diagnosis of deafness will never be easy.

**9:30 Discussion—10 Minutes**

**9:40 "Acute Suppuration in the Spaces of the Neck" and Motion Picture Demonstration: "Approaches to the Surgical Spaces of the Neck."**

SAMUEL IGLAUER, M.D., Cincinnati

SAMUEL IGLAUER

*M.D., Ohio Medical College, 1898; F.A.C.S.; Professor of Otolaryngology, College of Medicine, University of Cincinnati; Director of Otolaryngology, Cincinnati General Hospital, Children's Hospital, and Jewish Hospital; member, American Laryngological, Rhinological, and Otological Society, American Broncho-Esophagological Assn., American Laryngological Assn., American Academy of Ophthalmology and Otolaryngology.*

During recent years a great deal of exact attention has been given to deep infections in the neck. These infectious processes may localize in the lymph glands, in the "spaces" of the neck, or occasionally within the veins. The anatomic spaces contain loose distensible areolar connective tissue. The spaces are limited by tough, fibrous layers (fascia) or by muscles or viscera The spaces most commonly involved are: 1. Peripharyngeal; 2. Retropharyngeal; 3. Parapharyngeal (Pharyngo-maxillary); 4. Periesophageal (Mediastinitis); 5. Submental (Ludwig's Angina); 6. Septic thrombophlebitis (jugular) may occur as a complication.

The signs and symptoms of infection in each space will be enumerated, and the surgical approach to each space will be briefly described.

**Discussion and Bibliography Question Box (by request)**

**11:30 "Carcinoma of the Mastoid. Case report"**

HARVEY E. DOWLING, M.D., Detroit

**11:50 "Treatment of Hemorrhage in Otolaryngologic Practice"**

JAMES E. CROUSHORE, M.D., Detroit

**P. M.**

**12:10 Discussion of papers by Drs. Dowling and Croushore**

**12:30 Section Luncheon, Pantlind Hotel**

**Election of Officers of Section on Ophthalmology and Otolaryngology**

**Short Business and Medical Economics Session.**

**"Problems of Distribution of Ophthalmologic Care"**

RALPH H. PINO, M.D., Detroit

———MSMS———

**Thirty of the foremost out-of-state medical authorities will speak at the Annual Meeting of the Michigan State Medical Society, September 17, 18, and 19 at Grand Rapids.**

## SECTION ON PEDIATRICS

Chairman: HARRY A. TOWSLEY, M.D., Ann Arbor
Secretary: LEON DEVEL, M.D., Grand Rapids

**Swiss Room—Pantlind Hotel**

**A. M.**

**9:00 Case Report: "Tumor of Adrenal Cortex in an Infant of Seventeen Months" Color Photography and Autopsy Findings**

ROCKWELL M. KEMPTON, M.D., Saginaw
OLIVER W. LOHR, M.D., Saginaw

**9:15 Panel Discussion: "Diarrhea in Infancy"**

Chairman—CHARLES F. MCKHANN, M.D., Ann Arbor
Discussants—JAMES L. WILSON, M.D., Detroit
A. MORGAN HILL, M.D., Grand Rapids
WYMAN C. C. COLE, M.D., Detroit
MARK OSTERLIN, M.D., Traverse City
WARREN WHEELER, M.D., Detroit

**11:15 "Cerebral Atrophy in Infants and Children"**

HAROLD K. FABER, M.D., San Francisco

HAROLD K. FABER

*A.B., Harvard College, 1906; M.D., University of Michigan, 1911. Professor of Pediatrics, Stanford University School of Medicine; Pediatrician-in-Chief, Stanford University Hospitals, San Francisco. Member: American Pediatric Society, American Academy of Pediatrics, Society for Pediatric Research, et cetera.*

The causes of mental deficiency, spastic diplegia and convulsive disorders long obscure, have been clarified for a considerable percentage of cases by consideration of the effects of anoxia on the brain and by studies of the air encephalogram. Heredity is now found to play a much smaller part than had been previously supposed, and the same is true of intracranial hemorrhage at birth. It is, however, a mistake to believe that all cases date from the time of birth. Both fetal and postnatal disorders are of etiological importance. A series of cases is reviewed in which the causative factors are discussed. Some preventive suggestions are presented.

**12:00 Business Meeting—Election of Officers**

———MSMS———

## SECTION ON DERMATOLOGY AND SYPHILOLOGY

Chairman: CLAUD BEHN, M.D., Detroit
Secretary: FRANK STILES, M.D., Lansing

**Directors' Room—Civic Auditorium**

**A. M.**

**9:30 "Therapeutic Effects of Vitamin B Factors in Dermatology"**

CARROLL S. WRIGHT, M.D., Philadelphia
*(Biography on Page 733)*

The various factors of Vitamin B are of more than ordinary intrest to the dermatologist. Vitamin $B_1$ is now widely used to relieve the pain of herpes zoster and there is some evidence that it may be helpful in psoriasis. The spectacular improvement in pellagrins following the administration of nicotinic acid is now fully recognized. Riboflavin cures cheilosis, erosions around the eyes, "sharkskin" lesions of the skin over the nose and may be helpful in fissuring around the ears. It also in-

creases the efficacy of nicotinic acid in certain pellagrins (Spies). The filtrate factor (pantothenic acid) is probably not concerned in pellagra. Interest centers in its anti-gray hair action. Vitamin $B_6$ (pyrodoxine hydrochloride), often called the "rat anti-dermatitis factor" is known to have a definite action in the treatment of pellagra. This study is concerned chiefly with the treatment of various types of dermatitis (or eczema) with Vitamin $B_6$, including studies of the urinary excretions of this Vitamin.

**10:00 Discussion**

**10:20 "Diagnosis and Treatment of Vesicular and Vesiculo-pustular Eruptions of the Hands and Feet"**

S. William Becker, M.D., Chicago

S. William Becker

*B.S., 1918, M.D., 1921, University of Michigan; M.S., 1928, University of Minnesota; Assistant Professor Dermatology, University of Chicago, 1927-30, Associate Professor since 1930. Member A.M.A. and component societies; American Academy of Dermatology and Syphilogy; American Dermatological Association; and other organizations; Diplomate of American Board of Dermatology and Syphilology. Author: "Commoner Diseases of the Skin," 1935; "Ten Million Americans Have It," 1937; "Modern Dermatology and Syphilology," 1940 (with Obermayer).*

Critical study has shown that vesicular fungous infection of the hands is almost unknown. Vesicular eruptions of the feet (athletes' foot) have been proven to be caused by fungi in only five to 15 per cent of children and only 30 per cent of adults. The heat of summer increases the percentage of fungous infection to 50.

Epidermal hypersensitiveness to fungous allergens may result in vesicular lesions on the hands (trichophytids), produced by allergens reaching the palms from the feet through the blood stream. Other vesicular and vesiculo-pustular eruptions of the hands (bacterids, dyshidrosis on fungous basis) cannot be proven to be allergic, since epidermal hypersensitiveness does not exist in patients with such disorders.

**10:50 Discussion**

**11:10 "Five-Day Treatment of Early Syphilis"**
Loren W. Shaffer, M.D., Detroit

**11:40 Discussion**

**12:00 Election of Officers**

**P. M.**

**12:30 Luncheon at Pantlind Hotel**

———MSMS———

YOU ARE CORDIALLY INVITED
TO VISIT THE

**MICHIGAN STATE MEDICAL SOCIETY**

**— HOSPITALITY BOOTH —**

Exhibit Hall, Civic Auditorium

**A Southern Verandah of**
**Warm Friendship**
**and**
**Good Fellowship**

STOP AND CHAT WITH YOUR
STATE SOCIETY OFFICERS

## SECTION ON RADIOLOGY, PATHOLOGY AND ANESTHESIA

Chairman: Frank W. Hartman, M.D., Detroit
Secretaries: Clyde K. Hasley, M.D., Detroit,
Frank J. Murphy, M.D., Detroit

**Red Room—Civic Auditorium**

### PANEL DISCUSSION ON "SOME PHASES OF THE CANCER PROBLEM"

**9:30 A. M.**

**1. Diagnosis**

**(a) General**

Henry J. VandenBerg, M.D., Grand Rapids
N. M. Allen, M.D., Detroit

**(b) X-Ray**

Bernard H. Nichols, M.D., Cleveland

Bernard H. Nichols

*M.D., Starling Medical College, 1940; Practiced general medicine and roentgenology at Ravenna, Ohio, from 1904 to 1917; commissioned in Medical Corps of the U. S. Army and became instructor of Roentgenology at Cornell University, New York City. Member Base Hospital 55 as Chief of Department of Roentgenology in September 1918, directed Department of Roentgenology in France until end of war. Returned to U. S. A. and became Director of Roentgenology in the Embarkation Hospital, No. 3, New York City. Discharged from Army, September, 1920; Director of Department of Roentgenology in Cleveland Clinic from 1920 to date. President Radiological Society of North America in 1940. Co-author with Dr. William E. Lower of text book "Roentgenographic Studies of the Urinary System" has published about 100 scientific articles.*

Lawrence Reynolds, M.D., Detroit

**(c) Pathology**

Carl V. Weller, M.D., Ann Arbor
Donald C. Beaver, M.D., Detroit

**2. Treatment**

**(a) Surgical**

Roy D. McClure, M.D., Detroit
Fred A. Coller, M.D., Ann Arbor

**(b) Irradiation**

Rollin H. Stevens, M.D., Detroit
Isadore Lampe, M.D., Ann Arbor

**3. Registration and Follow-Up**

Shields Warren, M.D., Boston

*(Biography on page 728)*

Registration of cancer cases provides surest means of determining morbidity rate. However, objections by patients may vitiate accuracy. Registration at some central point of data and specimens from rare cases provide best means of advancing knowledge as shown by registry of bone sarcoma and other registries.

Fred J. Hodges, M.D., Ann Arbor
Traian Leucutia, M.D., Detroit
A. B. McGraw, M.D., Detroit

**Election of Officers**

———MSMS———

You gain two Postgraduate Credits by attending the Scientific Assembly at the Michigan State Medical Society Convention.

Come, and bring two or three other doctors in your car.

# FRIDAY AFTERNOON
# September 19, 1941

## *Seventh General Assembly*

**Black and Silver Ballroom—Civic Auditorium**

HENRY R. CARSTENS, M.D., Presiding
L. FERNALD FOSTER, M.D., and LEON DE VEL, M.D., Secretaries

**P. M.**

**1:30 "Focal Infection in the Nose and Throat—Retrospect and Forecast"**

D. E. STAUNTON WISHART, M.D., Toronto, Ontario

D. E. S. WISHART

*B.A., 1909, M. D., University of Toronto, 1915.*

*Three years' service in the field with the 10th (Irish) Division. Mediterranean Expeditionary Force — Sulva Bay, Serbia, Struma Valley and Palestine. Surgeon-in-Chief, Department of Otolaryngology, Hospital for Sick Children, Toronto, and Senior Demonstrator, Department of Otolaryngology, University of Toronto. Author of: Section on Surgery of the Ear, Lewis' System of Surgery: Relation of Infection of the Ear and Infection of the Intestinal Tract in Infants, Results of Five Years' Study—Routine Hearing Tests, and many other scientific articles.*

Focal infection is a concept firmly established in the minds of profession and public alike.

It is now a name which means something to every member of the community.

Bound as the original concept was, it was enlarged to cover too much. The result has been disappointment, disillusionment, misgivings, disbelief.

The pendulum is now swinging the other way. Focal infection should give place to point of entry of infection. Although many tonsils are better out—many do not require removal. Sinuses are rarely foci of infection.

The modern concept has always been that of the best otolaryngologist.

**2:00 "New Therapy of Common Skin Diseases"**
CARROLL S. WRIGHT, M.D., Philadelphia

CARROLL S. WRIGHT

*B.S., University of Michigan, 1917; M.D., University of Michigan, 1919. Instructor in Dermatology and Syphilology University of Michigan Medical School, 1920-1922; Associate Professor of Dermatology and Syphilology Graduate School of Medicine, University of Pennsylvania. Professor of Dermatology and Syphilology Temple University School of Medicine. Consultant Dermatologist to Philadelphia Municipal Hospital; Widener School for Crippled Children; Shriner's Hospital; Pennsylvania Institute for Blind; Pennsylvania Institute for the Dumb; Vineland Training School. Trustee of Research Institute of Cutaneous Medicine. Associate Editor of the "Medical World" and "The Weekly Roster and Medical Digest." Member of American Dermatological Association, Society for Investigative Dermatology, American Academy of Dermatology, Philadelphia College of Physicians, Nu Sigma Nu and Sigma Xi. Author of textbooks "Treatment of Syphilis" with Dr. Jay F. Schamberg and "Manual of Dermatology" and numerous contributions to dermatological literature.*

Since the turn of the century there has been marked progress in the treatment of many of the commonly seen skin diseases. Unsightly vascular nevi with the exception of port-wine marks can be successfully treated in one of several ways. The acne of adolescence, at our time considered a necessary evil to be suffered in silence until cured by nature, is in most instances amenable to modern therapy with a resultant lessening in badly scarred faces. The fungus infections which may attack any part of the human integumnet and its appendages can in most cases be conquered. In the treatment of those skin infections due to cocci, new drugs administered both internally and externally have improved therapeutic results. Psoriasis still remains a disease of unknown etiology and must still be considered incurable, but there is evidence of some progress as regards its therapy. Skin cancer, unless woefully neglected, may be regarded as curable with present day methods of treatment. The situation with regard to the "curability" of skin diseases has changed since the day 25 or 30 years ago that a dermatologist gave as one of his reasons for selecting this specialty that "patients with skin diseases never get well." These newer therapeutic procedures in the above named dermatoses will be discussed.

**2:30 INTERMISSION TO VIEW THE EXHIBITS**

**3:00 "Child Health in National Defense"**
BORDEN S. VEEDER, M.D., St. Louis, Missouri

*M.D., University of Pennsylvania, 1907, Professor of Clinical Pediatrics, Washington University, School of Medicine since 1917. Member of American Pediatric Society, American Academy of Pediatrics and other medical organizations. President of American Board of Pediatrics. Editor, Journal of Pediatrics. Member II, III, IV White House Conferences on Child Health and Welfare.*

A discussion of the problems of the child as related to National Defense. The situation in Germany and Great Britain before the war and the problems in the latter since the war started. The plans and what is now being done in the United States as regards nutrition, industrial centers and evacuation.

**ACKNOWLEDGMENT: The Children's Fund of Michigan is sincerely thanked for its sponsorship of this lecture.**

**3:30 "The Relationship of the Reticulo-Endothelial System to Cellular and Humoral Immunity"**

C. A. DOAN, M.D., Columbus, Ohio

C. A. DOAN

*B.S., Hiram College; M.D., 1923 Johns Hopkins Medical School. R.H.O., Johns Hopkins Hospital, 1923; Assistant Department of Anatomy, Johns Hopkins, 1924; Assistant Department of Medicine Harvard Medical School; Assistant Physician, Boston City Hospital; Assistant Thorndike Memorial Laboratory; Associate in Medical Research, Rockefeller Institute, 1925-30. Fellow and member of numerous scientific and medical organizations. President Ohio Public Health Association, 1939 to date; Director-at-large National Tuberculosis Association. Author of more than 100 scientific articles and books on medical subjects, particularly hematology and tuberculosis.*

The phagocytic cells which comprise the Reticulo-Endothelial System of the body have long been known to function physiologically as conservators of essential materials from worn out or senile blood cells. More recently, excessive pathologic sequestration of red cells, granulocytes or blood platelets in the parenchyma of the spleen, with symptom-producing destruction of these essential elements by hyperplastic splenic macrophages, has resulted in recognition of several clinical syndromes, each one of which has

been effectively controlled by successful splenectomy. Still more recently studies with "marked" dye antigens have definitely established these phagocytic elements as the most probable source of circulating specific anti-bodies. This latter evidence places on a sounder basis, the approach to the problems of humoral immunity, and demonstrates the extremely close association with cellular immunity.

**4:00 "The Ulcer Problem and The Surgeon"**

OWEN H. WANGENSTEEN, M.D., Minneapolis

O. H. WANGENSTEEN

*A.B., University of Minnesota, 1919; M.D., 1922; Ph.D., (Surgery), 1925; Professor in Surgery since 1931, Director of Department and Surgeon-in-Chief since 1930. Served in World War as a private in Student Training Corps. Member of many scientific and medical organizations.*

The importance of acid in the genesis of ulcer will be emphasized. Experiments performed in the Surgical Laboratory, in which ulcer has been produced in a variety of animals by stimulating the endogenous gastric secretory mechanism, will be reviewed. The choice of operative procedure in the surgical management of ulcer, which will insure effective depression of the gastric secretory mechanism, will be discussed, and the criteria of an acceptable operation defined. Technical and nutritional problems which confront the surgeon, affording his patient maximal assurances of safety, will be presented.

**4:30 End of Seventh General Assembly**

**END OF CONVENTION**

*All worth while laboratory examinations; including—*

Tissue Diagnosis

The Wassermann and Kahn Tests

Blood Chemistry

Bacteriology and Clinical Pathology

Basal Metabolism

Aschheim-Zondek Pregnancy Test

Intravenous Therapy with rest rooms for Patients.

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537 Millard St.
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The pathologist in direction is recognized by the Council on Medical Education and Hospitals of the A. M. A.

# TECHNICAL EXHIBITS

**Abbott Laboratories** — **Booth No. C-3**
**North Chicago, Illinois**

You are heartily invited to discuss the newer specialties with the Abbott-trained Professional Representatives in attendance. The wide assortment of products displayed in this exhibit merit your attention and study. Your questions are solicited. Description of the items shown is prohibited by space, so! COME IN AND SEE US!

**The Baker Laboratories** — **Booth No. D-7**
**Cleveland, Ohio**

Baker's complete line of infant foods, indicating the newer trends in modern infant feeding, will be on display. Baker MODIFIED MILK, powder and liquid, is a completely modified milk in which the composition of the essential food elements has been so altered and adjusted as to closely approximate breast milk. MELCOSE, a completely prepared liquid milk is very economical. MELODEX, maltose and dextrin, is made especially for modifying fresh or evaporated milk.

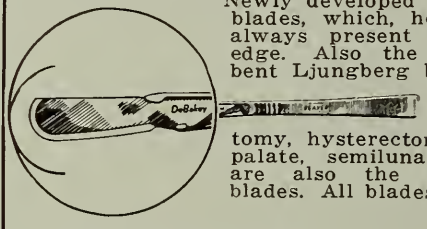
**Bard-Parker Company** — **Booth No. C-2**
**Danbury, Connecticut**

The following products will be exhibited at the Bard-Parker Booth: rib-back surgical blades, long knife handles for deep surgery, renewable edge scissors, formaldehyde germicide, and instrument containers for the rustproof disinfection of surgical instruments, transfer forceps for the aseptic transportation of instruments, hematological case for obtaining bedside blood samples, ortholator for obtaining accurate dental radiographs.

**Barry Allergy Laboratory, Inc.** — **Booth No. B-15**
**Detroit, Michigan**

A duplicate of the exhibit shown at the A.M.A. in Cleveland will be brought to the Michigan State Meeting in Grand Rapids. Services and products as well as many research problems will be presented in an interesting and unique manner. Both Mr. Charles Fowler and Mr. Barry, President, will be present to welcome all visitors.

**Rudolph Beaver, Inc.** — **Booth No. E-13**
**Waltham, Massachusetts**




Newly developed all-bellied DeBakey blades, which, held in any position, always present a rounded cutting edge. Also the recently developed bent Ljungberg blades for deep and special surgery, such as cholecystectomy, hysterectomy, hip, spine, cleft palate, semilunar cartilage. There are also the conventional shape blades. All blades fit every handle.

**Becton, Dickinson & Co.** — **Booth No. C-16**
**Rutherford, New Jersey**

A full line of B-D Products including clinical thermometers, hypodermic syringes and needles, Ace bandages, Asepto syringes and a full line of their diagnostic instruments including the new line of low priced blood pressure instruments, will be on display. Doctors will be particularly interested in No. 5018 which comprises a portable type manometer and triple change stethoscope in handy leather pouch with slide fastener.

**Bilhuber-Knoll Corporation** — **Booth No. B-11**
**Orange, New Jersey**

Your visits are welcomed. Mr. Laurel Johnson will be glad to give careful attention to questions and discussions on Dilaudid, Metrazol, Phyllicin, Theocalcin, etc. Register for a copy of the new "Note Book of Original Medicinal Chemicals." Colored charts—muscular, skeletal, circulatory, and nervous systems may be had upon request.

**Ernst Bischoff Company** **Booth No. E-19**
**Ivoryton, Connecticut**

ACTIVIN, the first American produced shockless foreign protein for nonspecific therapy. ANAYODIN is an effective, non-toxic amebicide. It attacks the amebas which have penetrated the tissues. DIA-TUSSIN, the original drop-dose cough remedy with a thirty-five year record of efficacy. LOBELIN-Bischoff, a direct stimulant to the respiratory center. The resuscitant indicated in all forms of respiratory failure or depression. STYPTYSATE, a vegetable hemostatic, with extremely high vitamin K activity, indicated for the control of all seeping hemorrhages.

**The Borden Company** **Booth No. F-1**
**New York City**

Visit the Borden exhibit to see infant foods of unsurpassed quality. Biolac, the distinctive new **liquid** infant food, affords convenience, economy, and optimal nutrition. Beta Lactos is **nature's** carbohydrate in an improved, readily soluble form. Dryco provides **formula flexibility** for every feeding problem. Also Klim, Merrell-Soule products, and Irradiated Evaporated Milk. Mr. H. H. Baker and Mr. A. D. Farrell will be in charge of the exhibit.

**Burroughs Wellcome & Co. (USA) Inc.**
**New York City** **Booths No. B-4 and B-5**

A representative group of fine chemicals and pharmaceutical preparations, together with new and important therapeutic agents of special interest to the medical profession, will be presented.

**Cameron Surgical Specialty Company** **Booth No. B-8**
**Chicago, Illinois**

See the new Cameron-Schindler Flexible Gastroscope, the Color-Flash Clinical Camera, the Projectoray, the Mirrorlite and latest developments in electrically lighted diagnostic and operating instruments for all parts of the body. You will also be interested in our radio frequency knives and coagulators.

**S. H. Camp and Company** **Booth No. C-18**
**Jackson, Michigan**

A life sized reproduction of the Camp Transparent Woman will be displayed as the central theme of a typical service department equipped to serve patients with the various supports prescribed by physicians. A complete line of merchandise for prenatal, postnatal orthopedic, visceroptosis, sacro-iliac, hernia and other specific conditions will be shown. Experts from the Camp staff will be in attendance to answer questions.

**Ciba Pharmaceutical Products** **Booth No. D-6**
**Summit, New Jersey**

Physicians are cordially invited to visit the Ciba Booth where they will find the well known line of CIBA specialties on display.
Mr. Frank H. Pratt will be at the booth and will be glad to discuss these products and supply interesting new information regarding many of them.

**Coca-Cola Company** **Booth No. A-7**
**Atlanta, Georgia**

Coca-Cola will be served to the physicians with the compliments of the Coca-Cola Company.

**Cottrell-Clarke, Inc.** **Booth No. D-17**
**Detroit, Michigan**

Mostly in the east, are some half dozen specializing printers engaged in supplying medical men with records and stationery; still nowhere is there an organization to compare with the personal attainments of Michigan's own COTTRELL-CLARKE, INC. (locally and popularly known as "the physicians' stationery folks") in developing varied types and sizes of folders and other ideas, all designed for facilitating neater and better record keeping. By all means see Cottrell-Clarke's exhibit this year.

**The Cream of Wheat Corporation** **Booth No. D-16**
**Minneapolis, Minnesota**

The 5-minute "CREAM OF WHEAT" will be on exhibit. This improved cereal is completely cooked in 5 minutes and has been fortified with additional vitamin $B_1$ (wheat germ and thiamin), iron, calcium, and phosphorus.

**Cutter Laboratories** **Booth No. E-4**
**Chicago, Illinois**

Cutter Laboratories will display their latest transfusion equipment, including the Saftivalve Transfusion Outfit and prepared human serum and plasma.

**Davis & Geck, Inc.** **Booth No. A-4½**
**Brooklyn, New York**

*"This One Thing We Do"*
Sutures

Davis & Geck, Inc. will display its complete line of sterile sutures including . . . fine gauge (0000 and 00000) catgut . . . a comprehensive group of sutures armed with swaged-on atraumatic needles and designed for specific surgical procedures . . . Dermalon skin and tension sutures (processed from nylon) which, because of marked physical advantages and economy, are rapidly replacing silkworm gut and other nonabsorbable materials.
A further feature of this exhibit will be a motion picture theater in which a diversified program of surgical films, in full color, will be presented daily.

**R. B. Davis Sales Company** **Booth No. E-21**
**Hoboken, New Jersey**

You are invited to enjoy a drink of delicious Cocomalt at Booth No. E-21. Cocamalt is refreshing, nourishing and of the highest quality. It is fortified with vitamins A, $B_1$ and D; calcium and phosphorus to aid in the development of strong bones and sound teeth; iron for blood; protein for strength and muscle; carbohydrate for energy.

**DePuy Manufacturing Company** **Booth No. E-16**
**Warsaw, Indiana**

You are invited to visit our exhibit where many new fracture appliances and bone instruments will be on display. Mr. Charles F. Klingel will be in charge and will be glad to answer any of your questions.

**Detroit Creamery Company** **Booth No. F-3**
**Detroit, Michigan**

Sealtest stands for quality milk, cream and ice cream. The red and white tradename is an assurance to the consumer of pure, wholesome dairy products produced in modern, sanitary plants operating under strict laboratory control.

**Detroit X-Ray Sales Co.** **Booth No. A-4**
**Detroit, Michigan**

The Detroit X-Ray Sales Company again takes pleasure in presenting important advances in shockproof x-ray equipment, designed in the "Mattern manner."
We feel that a visit to our booth will interest those contemplating the purchase of x-ray equipment. A cordial welcome is extended. Messrs. Hanks, McAlpine and Robinson, also Mr. R. J. Carseth, the Mattern factory representative, will be in attendance.

**Dictaphone Corporation** **Booth No. B-13**
**Detroit, Michigan**

You are cordially invited to inspect the new Dictaphone models and to learn how this modern dictating machine is serving physicians throughout the country. Make the Dictaphone Booth your headquarters.
The Dictaphone displays will be in charge of H. E. Trapp, Grand Rapids Manager, assisted by members of his staff.

**The Dietene Company** **Booth No. B-7**
**Minneapolis, Minnesota**

The Dietene Company cordially invites all members of the Michigan State Medical Society and their guests to visit our booth.
Our representatives will be looking forward to the opportunity of presenting our group of special purpose foods.

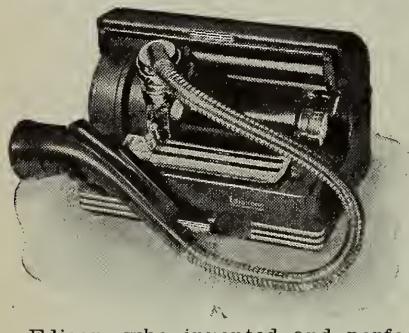
**Doho Chemical Corporation** **Booth No. E-8**
**New York City**

The Auralgan Exhibit consists of a model of the human auricle four feet high together with a series of twenty-four three dimensional ear drums, modeled under the supervision of outstanding otologists. Each of these drums depicts a different pathologic condition based upon actual case observation and prepared, in so far as possible, with strict scientific accuracy so as to be highly instructive and interesting to all physicians.

**Duke Laboratories, Inc.** **Booth No. C-4**
**Stamford, Connecticut**

The Duke Laboratories, Inc., will demonstrate the original, American-made, stretchable, adhesive surfaced bandage, Elastoplast, which is used whenever compression and support are required. Samples of Mediplast and Elastoplast Occlusive dressing, now being so widely used in plants on Defense work, will be available. Ask for samples of the prescriber's cosmetics—Nivea and Basis Soap—too.

**The Ediphone Company** **Booth No. E-5**
**Grand Rapids, Michigan**



THE EDIPHONE COMPANY extends a cordial invitation to all physicians to visit the display of EDIPHONE equipment. See the new Miracle Model Edison Voice Writer, also new Streamline Cabinet designs, manufactured by Edison, who invented and perfected sound recording. We welcome opportunity to demonstrate and discuss its application in the medical profession.

**J. H. Emerson Company** **Booth No. D-18**
**Cambridge, Massachusetts**

J. H. Emerson Company will demonstrate the new Emerson Combination Resuscitator, Inhalator, Aspirator apparatus, a safe, self-adjusting automatic breathing machine. A new, simplified mechanical principle has been incorporated in this unit which will be of interest to the doctor. The Emerson Diaphragm Type Respirator and the Emerson Suction pressure Boot for peripheral vascular diseases will also be on display.

**H. G. Fischer & Co.** **Booth No. B-16**
**Chicago, Illinois**

To every visitor at the Michigan State Medical Society we give this special invitation: Look under the hood of the new FISCHER models of apparatus shown! FISCHER shockproof x-ray apparatus, short wave units, ultra-violet and other generators are built to stand the very hardest day-by-day usage. Demand to be shown the real under-the-hood facts about FISCHER Models.

**C. B. Fleet Company** **Booth No. E-14**
**Lynchburg, Virginia**

Phosphe-Soda (Fleet) is a highly concentrated and purified, aqueous solution of sodium phosphates. It is nontoxic, rapid but mild in action without irritation of the gastric or intestinal mucosa. It is indicated for hepatic dysfunction and for its thorough eliminating and cleansing action on the upper and lower gut.

**General Electric X-Ray Corp.** **Booth No. A-5**
**Detroit, Michigan**

We cordially invite the physicians and their families who attend this meeting to make use of the lounge facilities provided at our booth for their comfort. We particularly look forward to a visit from users of our equipment and a cordial invitation is extended to all physicians who may have technical problems to discuss with our staff in attendance.

**Gerber Products Company** **Booth No. E-12**
**Fremont, Michigan**

The complete line of Gerber Baby Foods will be on display. There are two precooked dry cereals, one a wheat, the other an oatmeal cereal. Of the canned foods, there are both strained and Junior or chopped foods. Booklets available for distribution to mothers or patients on special diets as well as professional literature will be sent to registrants, for examination.

**Hack Shoe Company** **Booth No. A-2**
**Detroit, Michigan**

Twenty-five years of evolution in health shoe construction will be exemplified in the Hack Shoe Company exhibit.
This pioneer prescription shoe organization will also display a series of roentgenographs demonstrating how the foot bones lie in correctly and incorrectly fitting shoes.
HACK-O-PEDIC clubfoot and surgical shoes and TRI-BANLANCE shoes for men, women and children complete the exhibit.

**Hanovia Chemical & Mfg. Company** **Booth No. C-17**
**Newark, New Jersey**

The very latest in ultra-violet equipment will be demonstrated, including the outstanding uses of ultra-violet radiation in the fields of science, medicine and public health. Don't fail to see our new line of self-lighting ultra-violet high-pressure mercury arc lamps. Short and ultra short wave apparatus, Sollux Radiant Heat Lamps and our latest development, quartz ultra-violet lamps for air sanitation.

**J. F. Hartz Company** **Booths No. E-6 and E-7**
**Detroit, Michigan**

All physicians are invited to visit the booth of the J. F. Hartz Company—the progressive medical supply firm of Detroit who are nationally known.
An interesting display of instruments, equipment, and pharmaceuticals may be seen.
This firm has recently added another floor to care for the expanding business of its manufactured pharmaceuticals which are made under strict laboratory control, and in compliance with the regulations of the Federal Food and Drug Department.

**H. J. Heinz Company** **Booth No. E-18**
**Pittsburgh, Pennsylvania**

The makers of Heinz Strained and Junior Foods appreciate the confidence which the members of the Michigan State Medical Society have expressed in their recommendation of these foods for infant feeding and special diets. F. B. Heard and H. A. Elenbaas are at your service and will welcome members and friends at the exhibit.

**Holland-Rantos Company, Inc.** **Booth No. F-11**
**New York City**

The latest developments in the field of medically prescribed contraceptives will be featured at the booth of the Holland-Rantos Company. Rantex masks and Rantex caps for operating room will be of unusual interest to surgeons who are looking for something comfortable yet efficient in this line.

**The G. A. Ingram Co.** **Booths No. D-21 and D-22**
**Detroit, Michigan**

The G. A. Ingram Company extends an invitation to all visitors at the Michigan State Medical Convention to make their booth their headquarters and, especially, to investigate their new line of diagnostic instruments and their complete line of genuine Swedish stainless steel instruments. They will also show the latest in electrical equipment.

**Jones Metabolism Equipment Company** **Booth No. D-5**
**Chicago, Illinois**

Interview our representative, William Niedelson, about the development of the first waterless basal through 20 years by the addition of many scientific devices to assure accuracy, operative simplicity and guarantee the purchaser a lifetime of use without repair expense.

**"The 'Junket' Folks"** **Booth No. B-3**
**Chr. Hansen's Laboratory**
**Little Falls, New York**

"THE 'JUNKET' FOLKS" will serve rennet-custards made with either "Junket" Rennet Powder or "Junket" Rennet Tablets. There is also a display of "Junket" Brand Food Products. Enlarged photographs show how the rennet enzyme in rennet-custards transforms milk into softer, finer curds. Rennet-custards are widely recommended for infants, children, convalescents, postoperative cases and as a delicious, healthful dessert for the whole family. Fully informed attendants on duty.

**Kalak Water Company** **Booth No. E-17**
**New York City**

Visit the **KALAK WATER** booth and ask the representative how KALAK WATER may be employed to minimize the discomforts that so frequently follow the administration of the Sulfonamides. Ask the representative to serve you with a glass of KALAK WATER and learn for yourself how delicious and refreshing KALAK WATER really is when it is properly served.

**A. Kuhlman & Company** **Booth No. A-8**
**Detroit, Michigan**

The Kuhlman display will consist of a selected line of diagnostic instruments, a special line of indwelling catheters, cystoscopes, urologic instruments, pneumothorax apparatus, and a general line of instruments and accessories for physicians and surgeons.

**Lea & Febiger** **Booth No. D-14**
**Philadelphia, Pennsylvania**

Lea & Febiger will exhibit Portis' Digestive Diseases, Kraines' Psychoses, Ballenger's Manual, Rowe's Elimination Diets, Lewin's The Foot and Ankle, Rony's Obesity and Leanness and new editions of Holmes and Ruggles' Roentgenology, Joslin's Diabetes and Manual, Comroe's Arthritis, Bridges' Dietetics, Spaeth's Ophthalmology and Kessler's Accidental Injuries.

**Lederle Laboratories** **Booth No. E-22**
**New York City**

You are cordially invited to visit the Lederle Exhibit which will feature colored slides on the refining of Antitoxins. These slides were taken from a new motion picture film on this subject.
They will exhibit the many specialties for which they are noted and the latest releases in Sulfonamide drugs. Literature on the various Sulfonamides will be available.

**Libby, McNeill & Libby** **Booth No. B-17**
**Chicago, Illinois**

You are cordially invited to visit Libby, McNeill & Libby's exhibit where attendants will point out the merits of Homogenized Baby Foods, Chopped Foods and Evaporated Milk. Libby's special method of Homogenization makes Libby's Baby Foods extra smooth, extra easy to digest.

**Liebel-Flarsheim Company** **Booth No. C-7**
**Cincinnati, Ohio**

Liebel-Flarsheim Company will exhibit the well-known L-F Short Wave Generators as well as the famous Bovie Electro-Surgical Units and other new and interesting electro-medical apparatus.
A cordial invitation is extended to visit The Liebel-Flarsheim booth to inspect this outstanding equipment and have it demonstrated to you.

**Eli Lilly and Company** **Booth No. C-1**
**Indianapolis, Indiana**

Eli Lilly and Company will demonstrate the germicidal efficacy of "Merthiolate" (Sodium Ethyl Mercuri Thiosalicylate, Lilly) and the compatibility of the antiseptic with body cells and fluids. Other new and useful products will be featured.

**J. B. Lippincott Company** **Booth No. E-11**
**Philadelphia, Pennsylvania**

New Lippincott books of interest to every physician are Grollman's "Essentials of Endocrinology," Tobias' "Essentials of Dermatology," Haden and Thomas' "Allergy in Clinical Practice" and Youmans' "Nutritional Deficiencies." Leaman's "Management of the Cardiac Patient," today's sales leader, will be displayed, as will Thorek's three-volume "Modern Surgical Technic."

**The McKesson Appliance Company** **Booth No. D-20**
**Toledo, Ohio**

The McKesson Appliance Co. will exhibit a complete line of scientific equipment involving the uses of anesthetic gases and oxygen therapy. Both waterless and water spirometer type basal metabolism units will be shown. Practical demonstrations will be made on the new direct reading electrocardiograph.

**M & R Dietetic Laboratories, Inc.** **Booth No. C-11**
**Columbus, Ohio**

Similac, a completely modified milk especially prepared for infants deprived either partially or entirely of breast milk, will be featured. Mr. David O. Cox and Mr. L. A. MacDonald will appreciate the opportunity to discuss the merits of Similac and its suggested application for both the normal and special feeding cases.

**Mead Johnson & Company** **Booths No. C-21 and C-22**
**Evansville, Indiana**

"Servamus Fidem" means We Are Keeping the Faith. Almost every physician thinks of Mead Johnson & Company as the maker of Dextri-Maltose, Pablum, Oleum Percomorphum and other infant diet materials. But not all physicians are aware of the many helpful services this progressive company offers physicians. A visit to Booths C-21 and C-22 will be time well spent.

**Medical Arts Surgical Supply Company**
**Grand Rapids, Michigan** **Booths No. C-5, C-6 and B-14**

The Medical Arts Surgical Supply Company of the best city will show the exclusive line of Liebel Flarsheim short wave generators, the latest items in the beautiful Ritter ear, nose and throat equipment, and a complete suite of the Hamilton Nu Tone furniture along with the latest in autoclave and sterilized units. An invitation is extended to all doctors to call at these booths.

**Medical Case History Bureau** **Booth No. D-9**
**New York City**

Simplifying the Doctor's History Record and Bookkeeping System with the INFO-DEX RECORD CONTROL SYSTEM.
Maintenance of accurate, informative data on both history and financial records is essential in the modern doctor's practice. The INFO-DEX Record Control System helps to keep a constant finger on the physical and financial pulse of the patient. This system correlates information almost automatically for instant reference and research work. Its method of cross-indexing interesting cases according to the disease is unique and exclusive.

**The Medical Protective Company** **Booth No. D-8**
**Fort Wayne, Indiana**

The Medical Protective Company invites you to visit its booth. Medical Protective Service is an institution of the Medical profession whose legal liability problems we have concentrated upon for 42 years. Bring your professional liability questions and problems to us.

**The Mennen Company** **Booth No. A-1**
**Newark, New Jersey**

The Mennen Company will exhibit their two baby products—Antiseptic Oil and Antiseptic Borated Powder. The Antiseptic Oil is now being used routinely by more than 90 per cent of the hospitals that are important in maternity work. Be sure to register at the Mennen exhibit and receive your kit containing demonstration sizes of their shaving and after-shave products.

**Mellin's Food Company** **Booth No. E-15**
**Boston, Massachusetts**

Physicians are cordially invited to call and to place before our repesentatives all questions regarding

the composition of Mellin's Food and its usefulness in infant and adult feeding. It is suggested that constipation in infancy and the preparation of nourishment for adult patients who are far below normal as a result of prolonged illness or faulty diet are particularly interesting topics for discussion.

**The Wm. S. Merrell Company** **Booth No. B-2**
**Cincinnati Ohio**

The Merrell exhibit will feature Oravax, the oral catarrhal vaccine in enteric coated tablets for protection against the common cold; as well as other new prescription specialties of timely interest. Merrell representatives will be at the booth ready to show these products and answer any question.

**Michigan Medical Service** **Booth No. A-6**
**Michigan Hospital Service**
**Detroit, Michigan**

Complete information about the Medical Service and Surgical Benefit Plans of Michigan Medical Service will be available in this featured exhibit of the results of operation of the doctors' prepaid group medical service program.
There will also be an interesting display of the working of the companion hospital service plan of Michigan Hospital Service.

**The C. V. Mosby Company** **Booth No. D-3**
**St. Louis, Missouri**

Physicians and surgeons interested in the new developments in medicine and surgery are cordially invited to inspect the new publications which will be on display at the Mosby Booth. Outstanding new volumes on surgery, dermatology, pediatrics, gynecology, heart diseases, X-Ray, and practice of medicine will be shown.

**National Live Stock and Meat Board** **Booth No. B-12**
**Chicago, Illinois**

The exhibit of the National Live Stock and Meat Board will portray Meat as a source of the essential food elements, protein, fats, carbohydrates, calcium, phosphorus, iron, copper and six vitamins with special emphasis on the factors of the vitamin B complex.

**Nestle's Milk Products, Inc.** **Booth No. D-19**
**New York City**

The Nestle's Milk Products, Inc., exhibit will feature Lactogen which has given successful results in infant feeding for more than 15 years. Mr. J. B. Gibbs will be in charge of the exhibit.

**Parke, Davis & Company**
**Deroit, Michigan** **Booths Nos. C-12, C-13 and C-14**

Featured in the Parke-Davis exhibit will be the sex hormones, theelin and theelol; antisyphilitic agents, such as mapharsen and Thio-Bismol; posterior lobe preparations, including pituitrin, pitocin and pitressin; and various adrenalin chloride preparations.

**Pelton & Crane Company** **Booth No. D-4**
**Detroit, Michigan**

The Pelton & Crane Company will exhibit its complete line of office sterilizers, autoclaves and operating lights; also, fountain cuspidors and other specialty items. The exhibit will be in charge of Mr. C. K. Vaughan, who looks forward to the pleasure of renewing old acquaintances.

**Pet Milk Sales Corporation** **Booths Nos. C-9 and C-10**
**St. Louis, Missouri**

An actual working model of a milk condensing plant in miniature will be exhibited by the Pet Milk Company. This exhibit offers an opportunity to obtain information about the production of Irradiated Pet Milk and its uses in infant feeding and general dietary practice. Miniature Pet Milk cans will be given to each physician who visits the Pet Milk Booth.

**Petrolagar Laboratories, Inc.** **Booth No. D-2**
**Chicago, Illinois**

Petrolagar Laboratories, Inc. offer, in addition to samples of the Five Types of Petrolagar, an interesting selection of descriptive literature and anatomical charts. Ask the Petrolagar representatives to show you the HABIT TIME booklet. It is a welcome aid for teaching bowel regularity to your patients.

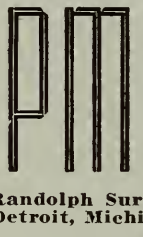
**Philip Morris & Company** **Booth No. E-1**
**New York City**

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject, and problems on the physiological effects of smoking.

**Picker X-Ray Corporation** **Booth No. B-10**
**New York City**

Visitors to the Picker X-Ray Corporation's booth will have an opportunity of seeing the well-known Picker-Waite "Century." This diagnostic unit provides for radiography and fluoroscopy in all positions from the vertical to the Trendelenburg—either hand or motor operated. Also on display will be a fine example of a combination portable and mobile shockproof x-ray unit. This apparatus is suitable for general office use or portable work in the patient's home. A number of newly developed x-ray accessories and diagnostic opaque chemicals will be exhibited.

**Professional Management** **Booth No. F-2**
**Battle Creek, Michigan**




Bring your professional and business problems for Free Consultation Service with any of the Professional Management Staff. Henry C. Black and Allison E. Skaggs, Battle Creek; Wendell A. Persons, Saginaw; Willis B. Mallory, Detroit; and Morris C. Flanders, Grand Rapids, will all be available to members of the Michigan State Medical Society.

**Randolph Surgical Supply Company,** **Booth No. B-9**
**Detroit, Michigan**

A varied assembly of the newest in medical and surgical equipment will be featured at the Randolph Surgical Supply Company exhibit. A skilled and efficient personnel will explain if you wish any of the features of the new equipment. diagnostic instruments, surgical supplies and electrical equipment. You will find your visit at the Randolph display very much worth while. Representatives in attendance will include Theo Ward, Harold Stormhafer, Arthur Rankin and Cliff Randolph.

**Riedel-de Haen, Inc.** **Booth No. B-6**
**New York City**

The Riedel-de Haen exhibit will feature two chemically pure bile acids: Decholin, the true choleretic, and Degalol, the fat emulsifier. Physicians are invited to register for abstracts of clinical reports on these products. Attending representatives will appreciate the opportunity to discuss the latest developments in the therapeutic application of chemically pure bile acids.

**S.M.A. Corporation** **Booth No. D-1**
**Chicago, Illinois**

Among the technical exhibits at the convention this year is an interesting new display, which represents the selection of infant feeding and vitamin products of the S.M.A. Corporation. Physicians who visit this exhibit may obtain complete information, as well as samples, of S-M-A Powder and the special milk preparations—Protein S-M-A (Acidulated), Alerdex and Hypo-Allergic Milk.

**Sandoz Chemical Works, Inc.** **Booth No. D-15**
**New York City**

This exhibit will stress Council-accepted products: Gynergen (ergotamine tartrate) for migraine and uterine hemostatis; Digilanid, the crystallized initial glycosides of Digitalis lanata, standardized gravimetrically and biologically; Scillaren and Scillaren-B, pure cardiodiuretic squill principles, and Dandoptal, an effective hypnotic. Also the original gluconate preparations of calcium (Calglucon) for oral and parenteral therapy.

**W. B. Saunders Company** **Booth No. B-1**
**Philadelphia, Pennsylvania**

Of particular interest are such new books as Ladd & Gross' "Abdominal Surgery in Infancy and Childhood," Kilmer & Tuft's "Clinical Immunology, Biotherapy and Chemotherapy," Steinbrocker's "Arthritis," Johnstone's "Occupational Diseases," Graybiel & White's "Electrocardiography in Practice," Krusen's "Physical Medicine," Novak's "Obstetrical and Gynecological Pathology," Walters & Snell's "The Gallbladder and Its Diseases," the 1941 Mayo Clinic Volume, Griffith & Mitchell's "Pediatrics," and a number of other important new books and new editions.

**Schering Corporation** **Booth No. E-2**
**Bloomfield, New Jersey**

The Schering exhibit includes real and striking recent advances such as SULAMYD, highly effective sulfacetimide of considerably lower toxicity; **orally** active sex hormones, ORETON-M, PROGYNON-DH and PRANONE tablets; efficient BARAVIT for bulk laxative therapy; and the new physiological antacid, LUDOZAN tablets, forming a true protective gel in your patient's stomach.

**Scientific Sugars Company** **Booth No. C-15**
**Columbus, Indiana**

Scientific Sugars Company will display Cartose, Hidex, and the Kinney line of nutritional products. Physicians are cordially invited to stop. Well informed representatives will be in attendance.

**Sharp & Dohme** **Booth No. D-12**
**Philadelphia, Pennsylvania**

Sharp & Dohme will show their new modern display this year, featuring "Delvinal" Sodium, "Lyovac" Normal Human Plasma, "Lyovac" Bee Venom Solution, and other "Lyovac" biologicals. There will also be on display a group of new biological and pharmaceutical specialties prepared by this house, such as "Propadrine" Hydrochloride products, "Rabellon," "Padrophyll," "Riona," "Depropanex" and "Ribothiron." Capable well-informed representatives will be on hand to welcome all visitors and furnish information on Sharp & Dohme products.

**Smith, Kline & French Laboratories** **Booth No. E-10**
**Philadelphia, Pennsylvania**

This year, Smith, Kline & French Laboratories begins its second century of service to the medical profession. The members of the Michigan State Medical Society are cordially invited to visit this exhibit and discuss the products displayed. These will include benzedrine inhaler, benzedrine sulfate tablets, benzedrine solution, and pentnucleotide.

**Frederick Stearns & Company,**
**Detroit, Michigan** **Booths No. D-10 and D-11**

Doctors are cordially invited to visit our attractive convention booths, to view and discuss outstanding contributions to medical science developed in the Scientific Laboratories of Frederick Stearns & Company.
Our professional representatives will be pleased to supply all possible information on the use of such outstanding products as Neo-Synephrin Hydrochloride for intranasal use, Mucilose for bulk and lubrication, Ferrous Gluconate, Potassium Gluconate, Gastric Mucin, Susto, Trimax, Appella Apple Powder, Nebulator with Nebulin A, and our complete line of vitamin products, together with liver extract U.S.P., oral and subcutaneous for the treatment of pernicious anemia as well as other products will be readily available.

**E. R. Squibb & Sons** **Booth No. D-13**
**New York City**

A number of new and interesting chemotherapeutic specialties, vitamin, glandular and biological products will be featured in the Squibb Exhibit. Well informed Squibb Representatives will be on hand to welcome you and to furnish any information desired on the products displayed.

**U. S. Standard Products Company** **Booth No. C-20**
**Woodworth, Wisconsin**

MAGSORBAL will be on display by the U. S. Standard Products Company at the State Medical Meeting in Grand Rapids. Have our representative tell you about the merits of this product. Other items of great interest will be on display.

**Wall Chemicals Corporation** **Booth No. E-3**
**Detroit, Michigan**

Wall Chemicals Corporation, a division of the Liquid Carbonic Corporation, will have on display a quantity of compressed gas anesthetics and resuscitants. There will also be a complete line of oxygen therapy equipment including the "Walco" oxygen humidifier, for the nasal administration of oxygen, and the "Walco" oxygen face mask.

**Westinghouse X-Ray Co., Inc.** **Booth No. C-19**
**Detroit, Michigan**

The Westinghouse X-Ray Division will display the most recent development of compact x-ray equipment. Considering the size, there is greater power than heretofore. The recently publicized bactericidal "Sterilamp" and "Thin Window Lamp" will be available for examination. The "Scialytic," standard of surgical lighting will be shown in the latest models.

**White Laboratories, Inc.** **Booth No. E-9**
**Newark, New Jersey**

White Laboratories, Inc., will present White's Cod Liver Oil Concentrate Liquid, Tablet and Capsule (and White's Thiamin Chloride Tablet)—all Council-accepted.
The practical advantages provided by cod liver oil concentrate as an economical and convenient measure of vitamins A and B prophylaxis and therapy will be discussed. Pertinent information concerning our newer knowledge of the vitamins and vitamin deficiency states will be offered for consideration.

**Winthrop Chemical Company, Inc.** **Booth No. C-8**
**New York City**

A cordial invitation is extended to every member of the Michigan State Medical Society to visit Booth No. C-8 where representatives will gladly discuss the latest preparations made available by this firm. You will receive valuable booklets dealing with anesthetics, analgesics, antirachitics, antispasmodics, antisyphilitics, diagnostics, diuretics, hypnotics, sedatives and vasodilators.

**John Wyeth & Brother, Inc.** **Booth No. A-3**
**Philadelphia, Pennsylvania**

You are cordially invited to visit the John Wyeth and Brother exhibit where the following pharmaceutical specialties will be on display: Amphojel, Wyeth's Alumina Gel, for the control of hyperacidity and peptic ulcer. Wyeth's Hydrated Alumina Tablets, for the convenient control of hyperacidity. Kagomagma, Wyeth's magma of alumina and kaolin, for the control of diarrhea. B-Plex, Wyeth's Vitamin B Complex Elixir. A-B-M-C Ointment, the rubefacient, counter-irritant, for the relief of arthritic pain. Bepron, Wyeth's Beef Liver with iron. Bewon Elixir, Wyeth's palatable appetite stimulant.

**Zimmer Manufacturing Company** **Booth No. E-20**
**Warsaw, Indiana**

A complete line of fracture equipment will be on display. Your factory representative, Mr. Fisher, will be pleased to see you, and demonstrate any item. Of special interest—a sterilizable bone plate and screw container which should be seen, the new S-M-O Bone Plates and Screws, a screw driver that is different, and the Luck Bone Saw complete with all attachments.


———MSMS———

**The Glad-hand Awaits You at the 1941 MSMS Convention!**

## THE MICHIGAN POSTGRADUATE PROGRAM

### Autumn, 1941

The Michigan State Medical Society, in coöperation with the University of Michigan Medical School, Wayne University College of Medicine, and the Michigan Department of Health, announces the semi-annual extramural course for practising physicians to be given in October, 1941.

| CENTERS | DATES |
|---|---|
| Ann Arbor | October 2, 9, 16, 23 |
| Battle Creek* | September 30, October 7, 14, 21 |
| Flint | October 1, 8, 15, 22 |
| Grand Rapids | October 2, 9, 16, 23 |
| Lansing* | October 2, 9, 16, 23 |
| Mount Clemens | October 1, 8, 15, 22 |
| Saginaw* | September 29, October 6, 13, 20 |
| Traverse City* | October 3, 10, 17, 24 |

### Subjects

The Modern Treatment of Fractures.
The Recognition and Prevention of Accidents of Pregnancy. (Obstetrician).
The Complications of Pregnancy. (Internist).
Emergency Drugs in General Practice.
The Office Management of the Allergic Patient.
The Office Management of the Diabetic.
The Diagnosis and Management of Cancer of the Gastro-intestinal Tract.
Abnormalities of Growth and Development in Children.

**The Course Is Offered Without Cost to All Legally Qualified Physicians in Michigan**

### Intramural Courses

**Nutritional and Endocrine Problems.**
November 3-6, inclusive, University Hospital, Ann Arbor.

**Electrocardiographic Diagnosis.**
November 3-8, inclusive, University Hospital, Ann Arbor.

**Anatomy.**
September 10-throughout year. (For further information write or call Dr. M. R. Collins, Wayne University Medical School, Detroit).

**Anatomy.**
Second Semester (Thursdays), 1942. West Medical Building, University of Michigan, Ann Arbor.

Details of intramural courses will be available soon.

Chairman, Committee on Postgraduate Medical Education
Michigan State Medical Society
Room 2040, University Hospital
Ann Arbor, Michigan

*Spring programs will be given in Kalamazoo, Jackson, Bay City, and Cadillac.

## THE BUSINESS SIDE OF MEDICINE IN BOOM TIMES

By ALLISON E. SKAGGS and HENRY C. BLACK

Practicing medicine in boom times is now being experienced by many doctors for the first time in their lives. Even those men who were practicing during the strenuous days of the first World War and during the affluent years of the late '20's find business situations a bit different today. Money is circulating rapidly; most employables are employed; wages have been hiked upward; and the consequent greater demand for medical services finds fewer doctors available due to the numbers in military service. During the past ten years the "times" have been blamed for poor collections, insufficient business, low prices and inability to expand office facilities and equipment. Now that "hard times" cannot be blamed for these situations, it would seem at first glance that everything should be rosy, yet many of the doctors who have started practice in the last ten years will make the same mistakes that were made by their predecessors during the first World War, and many of those who experienced the depression which began in 1929 will allow their fears of what is to come to confuse their judgment again in this change of economic conditions, particularly as to the "timing" of the economic cycle.

While most doctors who were not already operating at full capacity are experiencing increased income, it is necessary for them to realize that taxes, particularly income taxes, will in many cases use up the increase in net profits. Instead of paying a nominal amount on each March 15, it may be necessary to set aside a substantial sum each month as a part of the regular expenses so that funds will be available for the tax when due. Serious errors leading to financial embarrassment will result from ignoring this situation and spending or investing the money as it comes in without thought for future tax needs.

Although increased volume of work usually brings increased cash receipts, it also increases expenses, and it has been our experience that the actual percentage of collections in good times is often lower than in years of depression. While this may seem like a paradox, we know it to be true, probably due to the fact that during boom years optimism prevails and patients make the same mistakes outlined above, spending their money and incurring obligations for houses, furnishings, cars, and other things which they would deny themselves during poor years, with the result that there are not sufficient funds to pay normal living expenses, such as medical bills, when they come due. Neglected collections usually result not only in a loss of money but in a deterioration of the quality of the practice as the dead-beat and slow-paying patients gradually gravitate to the doctor whose business procedures are lax.

Mistakes in judgment will be made during the coming years in two entirely opposite but equally unfortunate ways. The young man experiencing "easy money and lots of it" for the first time and with more practice than he knows what to do with, will in some cases go completely overboard in expanding his office, taking on help, buying property, making too many long term commitments in life insurance and investments requiring *continued* regular payments, and will find himself eventually overexpanded in his finances just as many others did in 1929 and '30. At the other extreme, the ultra-conservative, remembering the bitter lesson of the last depression and confusing the present boom with the industrial boom of the late '20's, will miss opportunities for professional advancement, fail to expand his practice as he should, overeconomize and end up with a practice that is slipping, a lack of faith in things financial, and a final realization of that unfortunate situation —an irretrievably lost opportunity.

Both of these errors can be avoided only by objective thinking and planning based on accurate information. All doctors know why a patient should not diagnose his own case and experi-

ment on his own treatment. Lack of coördinated facts, lack of experience, and the difficulty of objective reasoning are three of the many reasons. In the doctor's planning of his own business affairs he, too, often practices "patent medicine." By careful records of his assets, his debts, his income and his expenses, he can have the facts; by analysis and comparison of his own years of experience, he can estimate the future, and by doing these two things painstakingly over a period of time, he will develop a judgment sufficient for his needs. Few optimistic ideas and few pessimistic fears are wholly accurate. As a famous politician of this generation says, "Let's look at the record."

Charles Dickens wrote—"Annual income 20 pounds, annual expenditures 19.96, result happiness; annual income 20 pounds, annual expenditures 20.06, result misery." So close is the margin between pleasant, unworried business affairs and the harassed life of a man forever behind the well-known "eight ball" that we are prompted to give an example, showing how slight an additional cash requirement can bring an unbalanced personal budget, particularly at this time. Supposing you took in $10,000.00 last year, and your office expenses were $4,000.00, leaving you a net of $6,000.00; just suppose that your living expenses were $5,000.00, and your life insurance $500.00, which left you a net surplus of $500.00, with an income tax to pay out of that amounting to $175.00, which finally left $325.00 neither spent nor invested. At the beginning of this year you bought a house agreeing to pay $50.00 per month. That is $600.00 per year and you must make $275.00 more than last year in order to come out even. Then, supposing your income tax is tripled as is very likely this year, adding $350.00 to your net deficit. It is the long term obligation to fixed monthly payments without knowing in advance that there will be sufficient surplus to take care of these payments, which, added to the new tax burden, will cause the most financial embarrassment.

To avoid such errors in judgment in times like these, there is nothing so necessary as complete accurate knowledge of your income, expenses, requirements for the payments of debts, and the relation they bear to assets and liabilities. In other words, prepare and maintain a case history on your business affairs so that your financial decisions are based on the same accurate knowledge as are your professional decisions. In this way, what could be a serious time for you can be made into an opportunity, which probably will not repeat itself during your lifetime.

———MSMS———

## PROPOSED AMENDMENTS TO CONSTITUTION AND BY-LAWS OF MICHIGAN STATE MEDICAL SOCIETY

The following amendments were presented at the 1940 Convention and according to the Constitution were referred to the 1941 Session of the House of Delegates for final consideration:

### Constitution

1. Amend Article IV, Section 3 to read as follows: "The officers of this Society, Past Presidents, and Members of The Council shall be ex-officio members of the House of Delegates without power to vote."

Comment: This amendment adds the past presidents of the Michigan State Medical Society to the ex-officio members of the House of Delegates.

2. Amend Constitution, Article IX, Section 4, to read as follows: "The Secretary shall collect all annual dues and all monies owing to the Society, depositing them in an approved depository and disbursed by him upon order of The Council, or invested by him in United States Government bonds with approval of The Council."

Comment: The Reference Committee, in 1940, recommended that this proposed amendment re finances be rejected.

3. Amend Article XII, Section 1 to read as follows: "The House of Delegates may amend any article of this constitution by a two-thirds vote of the Delegates seated at any annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been published at least once during the year in the Journal of the Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken."

Comment: This amendment changes the word "present" to "seated." See next amendment re "Sessions and Meetings."

4. Amend Constitution by adding a new article to be known as Article XII:

"SESSIONS AND MEETINGS

"Section 1. A session shall mean all meetings at any one call.

"Section 2. A meeting shall mean each separate convention at any one session."

Comment: This new Article is for the purpose of clarifying what is meant by the terms "sessions and meetings."

5. Amend the Constitution by renumbering old Article XII to "XIII."

### By-Laws

6. Amend By-Laws, Chapter 10, Section 1, to read as follows: "These By-Laws may be amended by a majority vote of the delegates present, after the proposed amendment is laid on the table for one meeting. These By-Laws become effective immediately upon adoption."

Comment: This amendment consists of substituting the word "meeting" for the word "session" to bring the By-Laws in conformity with the Constitution upon the adoption of above proposed amendments, thereto.

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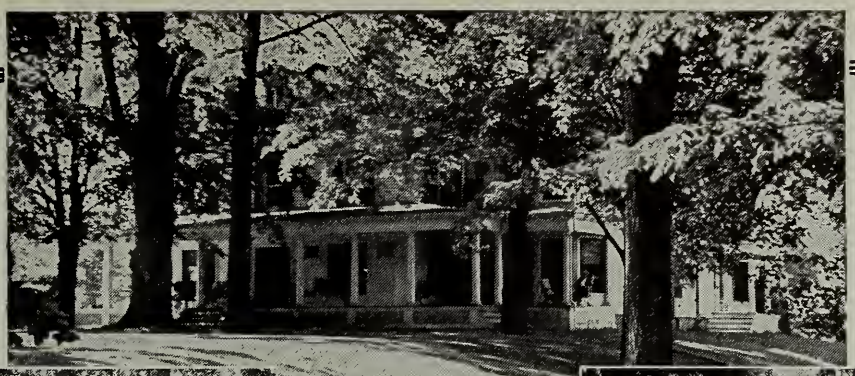

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# INTERNATIONAL MEDICAL ASSEMBLY

## Inter-State Postgraduate Medical Association of North America

**Public Auditorium, Minneapolis, Minnesota, October 13, 14, 15, 16, 17, 1941**

Pre-Assembly Clinics, October 11; Post-Assembly Clinics, October 18, Minneapolis Hospitals

President, Dr. Roscoe R. Graham
President-Elect, Dr. George R. Minot
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Dr. Arthur G. Sullivan
Secretary, Dr. Tom B. Throckmorton

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William F. Braasch, Rochester, Minn.
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James G. Carr, Chicago, Ill.
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John F. Erdmann, New York, N. Y.
A. Carlton Ernstene, Cleveland, Ohio.
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Harry S. Gradle, Chicago, Ill.
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Russell L. Haden, Cleveland, Ohio.
Emile F. Holman, San Francisco, Calif.
Verne C. Hunt, Los Angeles, Calif.
Thomas E. Jones, Cleveland, Ohio.
Elliott P. Joslin, Boston, Mass.
Louis J. Karnosh, Cleveland, Ohio.
Chester S. Keefer, Boston, Mass.
H. Dabney Kerr, Iowa City, Iowa.
J. Murray Kinsman, Louisville, Ky.
Herman L. Kretschmer, Chicago, Ill.
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John C. McKinley, Minneapolis, Minn.
Irvine McQuarrie, Minneapolis, Minn.
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Ralph Pemberton, Philadelphia, Pa.
Dallas B. Phemister, Chicago, Ill.
Isidor S. Ravdin, Philadelphia, Pa.
Hobart A. Reimann, Philadelphia, Pa.
Erwin R. Schmidt, Madison, Wis.
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George E. Shambaugh, Chicago, Ill.
Leroy H. Sloan, Chicago, Ill.
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Virgil P. W. Sydenstricker, Augusta, Ga.
Willard O. Thompson, Chicago, Ill.
Maurice B. Visscher, Minneapolis, Minn.
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Owen H. Wangensteen, Minneapolis, Minn.
Soma Weiss, Boston, Mass.
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Wallace M. Yater, Washington, D. C.
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Hotel Nicollet - Hotel Radisson

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Hotel Committee: A. N. Bessesen, Jr., Chairman, 2000 Medical Arts Bldg., Minneapolis, Minnesota.

A program will be mailed to every member of the medical profession in good standing in the United States and Canada on or about September first.

Any member of the profession in good standing who does not receive a program, please write the Managing-Director and one will be mailed.

COMPREHENSIVE SCIENTIFIC AND TECHNICAL EXHIBIT. SPECIAL ENTERTAINMENT FOR THE LADIES

*Deceased, August 20, 1941

# ANNOUNCEMENT

The Neuro-Psychiatric Institute of the Hartford Retreat announces the following appointments to its professional and assisting staffs:

## PROFESSIONAL STAFF

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C. Charles Burlingame, M.D., F.A.C.P.

Associate Psychiatrists
Leslie R. Angus, M.D.
H. Ryle Lewis, M.D.

Senior Psychiatrists
Edward L. Brennan, M.D.
William G. Young, M.D.
Josef A. Kindwall, M.D.
John W. Kinley, M.D.

Psychiatrists
Gordon H. Hutton, M.D.
Paul L. Phillips, M.D.
Ralph M. Stolzheise, M.D.
Robert L. Wagner, M.D.
Percy L. Smith, M.D.
Thomas G. Peacock, M.D.

Fellows in Psychiatry
Max Hayman, M.D.
Holmes E. Perrine, M.D.
Harry L. MacKinnon, M.D.
Laurence A. Hessin, M.D.
Robert S. Darrow, M.D.
Robert J. Hawkins, M.D.
Margaret A. Daley, M.D.

Psychologist
Blake D. Prescott, B.A., M.A., M.D.

Research Fellow in Psychiatry
Robert J. Streitwieser, M.D.

Research Associate in Psychiatry
John M. Cotton, B.Sc., M.D.

Research Associate in Endocrinology
Marjorie B. Patterson, B.S.

Research Associate in Electro-encephalography
Herbert H. Jasper, A.B., M.A., Ph.D., és Sc.

Research Associate in Electro-encephalography
Wladimir Theodore Liberson, Ph.D., M.D.

Research Assistant in Allergy
Marjorie A. Darken, B.S., M.A.

Oculist
Harry St. C. Reynolds, M.D.

Gynecologist
Louis F. Middlebrook, M.D.

Roentgenologist
Gilbert W. Heublein, M.D.

Assistant Psychologist
Marie C. Morgan, B.A.

Dentist
George B. Odlum, D.M.D.

Physician, Employees' Health Service
William A. Wilson, M.D.
Joseph F. Jenovese, M.D.

## THE ASSISTING STAFF

Assistant to the Psychiatrist-in-Chief
Stella H. Netherwood, R.N.

2nd Assistant to the Psychiatrist-in-Chief
Mildred E. LaBombard

3rd Assistant to the Psychiatrist-in-Chief
Ena Greenstreet

Secretaries to the Psychiatrist-in-Chief
Adelaide Ray
Rosalie Carroll

Introductor
Mary V. Cronin, R.N.

Assistant Introductors
Evelyn B. Dunlap, R.N.
Josephine LiVecchi, B.A.

General Director of Nursing
Elsie C. Ogilvie, R.N.

Director of Nursing
Mary E. Curtis, B.N., R.N.

Director of Nursing Education
Helen M. Roser, M.A., B.A., R.N.

Assistant Director of Nursing Education
Regina A. Driscoll, B.A., R.N.

Nursing Instructor
Edla C. Warner, R.N.

Nursing Supervisors
Mary Giannettino, R.N.
Alice Giannettino, R.N.
Margaret L. Fehr, R.N.
Erma D. Johnson, R.N.

Nursing Supervisors (cont.)
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Louise M. Perry, R.N.
Lois Cramb, R.N.

Research Technician
Elizabeth I. Gienandt, B.A.

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Mabel M. Bing You, Certificate
V. Wilson School

X-Ray Technician
Marion L. Kaul, Diploma
Northwest Institute

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Frank V. Zito, Ph.G.

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Associate Librarian, Jelliffe Library
Katherine Malterud

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Leslie School

Oral Hygienist
Patricia A. McCabe, O.H., Certificate
Columbia University

Chief of Medical Records Room
Ella C. Saunders

Correspondence Secretary
Lee A. Ferguson

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Thomas E. Murphy, LL.B.
Henrietta L. Hills

Resident Auditor
Albert W. Stevens

Comptroller
Alfred S. Hampson

Chief, Purchasing and Contract Department
Helen R. Schait, Certificate
Pratt Institute

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C. Pauline Kline

Employee Instructor
Anne F. Browne, R.N.

Employment Managers
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Doyle D. Henry, R.N.

Manager of Graduate Clubs
Helena E. Woodall, Skerry College, Plymouth, England

Assistant Manager of Graduate Clubs
Sophie Coleman

Chief, Dietary Department
Armand L. Pelletier

Supervisor of Food Service
Helen G. Jacobs

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Executive Officer, The Faculty of Instructors for Guests
Constance Smithwick, R.N.

Associate Executive Officer, The Faculty of Instructors for Guests and Chief Instructor University Extension Courses
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Carolyn C. Bronson, Art Students League of New York

Social Director
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Margaret F. Head, B.A.
Effie Jane Sutherland, B.A.

Instructor, French
Marguerite Yourcenar, B. és L.

Librarian, Guest Library
Phoebe L. Adams, B.A.

Consulting Librarian, Guest Library
Mary Alice Thoms, B.A.

Instructor, Horticulture
Robert F. Stevens, B.S., M.S.

Instructors, Current Events
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John W. Colton, B.A., B.Lit.

Instructors, Physical Education
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Frank Kubin, B.A.
Alice F. Richards, B.S.
Frances E. Guild, B.S.

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Instructor, Painting and Modelling
Catherine D. Cardamon, Certificate
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Helen Faude, Yale Art School

Instructor, Appreciation of Art
A. Everett Austin, Jr., B.S.

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Doris Runshaw

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Martha L. Blake, Certificate
Bay Path Institute

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Theodosia Van Norden Emery, Master of Bridge and Director
Culbertson National Studios

Instructor, Dancing
Doris Gibbons, Russian School of Ballet Dancing

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Boston School of Handicrafts
Jean P. Harris, Certificate
Pratt Institute

Instructors, Manual Arts
Alexander Koszalka
N. Grant Kelsey, Certificate
Pratt Institute

Instructor, Dietetics
Helen L. Ronan, Certificate
Pratt Institute

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Venila B. Colson, B.A., M.A.

Instructor, Music, Vocal
Josephine S. Koch, Yale School of Music

Instructor, Cello
Katherine H. Howard, Diploma
Royal School of Music, Berlin

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Emma S. Miller

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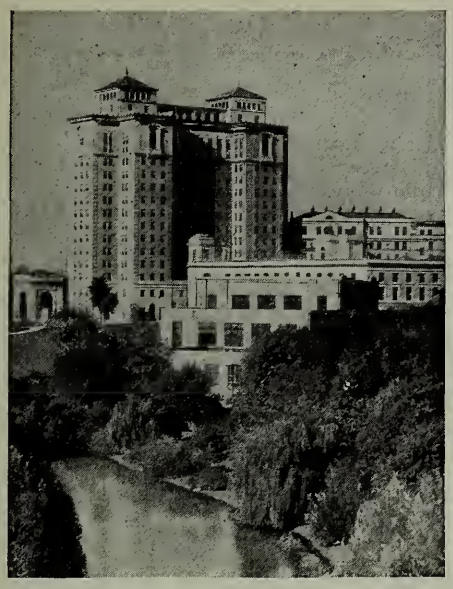

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# MICHIGAN'S DEPARTMENT OF HEALTH

HENRY A. MOYER, M.D., Commissioner, Lansing, Michigan

## MALARIA IN MICHIGAN

Malaria may return to Michigan as an endemic disease of some importance as a result of increased migration between Michigan and southern states. In pioneer days, malaria was common in the state. The malaria area of the country is gradually extending northward and native malaria has been found in some sections in Michigan, but now there is a possibility of a marked increase in infection due to the national defense and Army training programs. No increase in reported cases has occurred, however. Industrial jobs are apparently attracting southern families, and the Army is sending drafted men from Michigan into southern camps and bringing into the state men from southern malarial regions.

In view of this new situation the Department suggests to physicians an increasing likelihood of their finding malaria, especially in migrant families from the South or in persons returned from the South. Last year, 60 cases of malaria were reported in Michigan, and in the last five years, 379 cases. The supposition has been that in recent years all malaria cases in Michigan have been imported, but epidemiological studies have shown that in some instances where southern families have lived in the state malaria has been spread locally.

The Anopheles quadrimaculatus mosquito which carries malaria infection is present in certain areas of Michigan. It is a common, night-biting mosquito which lives either about homes or in woods. In all cases of malaria, in addition to treatment for the patient, the home should be screened to keep infection from mosquitoes.

## SIXTY-FIVE COUNTY HEALTH UNITS

In the first six months of 1941, three new full-time health departments were established in Michigan. The Shiawasse county department was established January 1, and departments were established July 1 in Washtenaw and Kalamazoo counties. Only 18 counties are now without full-time health department services.

The Kalamazoo unit is Michigan's first county-city health department. The director is Dr. I. W. Brown, who headed the Kalamazoo city health department and who has just returned from a year's study in public health at Johns Hopkins.

In several instances in the state, full-time city and county health departments are operating independently, but the Kalamazoo unit will be the only one to have a single director and to provide services equally to city and county residents.

Washtenaw's new unit is headed by Dr. Otto Engelke, who has been associated with the W. K. Kellogg Foundation in Calhoun county for more than a year. The appointment became effective July 16.

Oakland county's health department, established December 1, 1926, was the first full-time county unit in the state. That was a short time before the 1927 legislative act providing for county departments and two years before the amendment of 1929 which gave state financial aid to county and district health departments. Financial support has been given to county health units by the W. K. Kellogg Foundation (starting in 1931) and by the Children's Fund of Michigan (starting in 1929). The number of counties with their own or with district health services totaled 21 by 1935, and 62 by the end of 1940. The number is now 65.


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Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by Neisseria gonorrheae.[1] An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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## SMALLPOX CASES INCREASE

More smallpox was reported in Michigan in six months this year than in the whole of last year. For 1940, the year's total was 76 reported cases. From January through June of 1941, 90 cases were reported.

———MSMS———

## POLIOMYELITIS LOW IN JULY

Infantile paralysis cases reported in July to the Michigan Department of Health totaled 24 compared with 28 in July of 1940. Last year, the record epidemic came on very swiftly in August when more than 300 cases were reported and went to a peak in September when more than 500 cases were reported.

———MSMS———

## SYPHILIS TESTS REACH NEW HIGH

Blood tests for syphilis in public and private laboratories in Michigan are now running more than 3,000 a day. The number of blood tests and other laboratory examinations for syphilis (darkfields and spinal fluids) went beyond 100,000 for the first time in May, when the total was 100,197.

Of this total, 44,534 tests were done by the four Michigan Department of Health laboratories, 21,336 by city health department laboratories aided financially by the state, and 34,327 by private, registered laboratories.

Never before has there been in the state such general and effective use of the blood test to discover syphilis infection. There are several reasons. Every man called for physical examination by Selective Service is given a blood test, every couple applying for a marriage license must have blood tests, and so must all prospective mothers. In addition, it is becoming policy in hospitals to give a blood test to every patient, physicians are using them increasingly, and factories are beginning to ask for blood tests on new workers.

Wartime conditions have greatly influenced the control methods used against venereal disease. Reporting of cases to health departments was required by law after the draft of 1917 had shown a surprising amount of infection, and more than 20 years later another Selective Service law is putting new emphasis on blood tests, whether or not there is any suspicion of infection.

Three things are necessary in the control of syphilis, and in all three Michigan is a leader among the states. Reporting of cases and blood testing are two of the essentials in control. The third is treatment. The state health laboratories do the tests without charge for physicians, and the State Health Department supplies free drugs to physicians for treatment of syphilis patients. Much progress is being made in bringing infected persons under treatment. For example, names of men rejected for the Army because of syphilis are being reported to health department so that treatment can be arranged.

Michigan's infection rates are low as shown by tests required of brides and grooms, of prospective mothers, and of men called by Selective Service. Among drafted men, the syphilis rate is less than two per cent. Among applicants for marriage licenses, it is about one per cent. Among prospective mothers, it is well under one per cent.

———MSMS———

**The progressive Doctors of Medicine in Michigan will be present at the Annual Meeting of the Michigan State Medical Society, September 17, 18, and 19 in Grand Rapids.**


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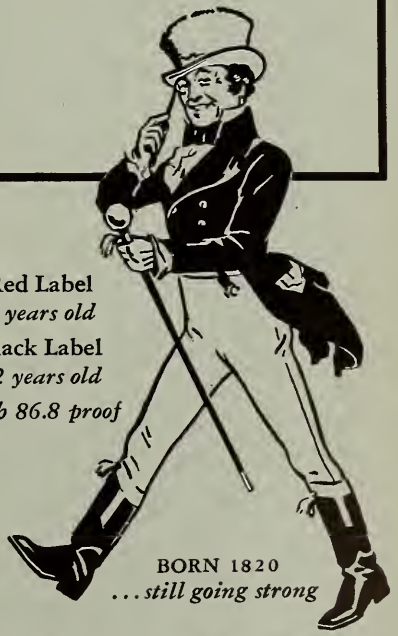

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# ✶ COUNTY AND PERSONAL ACTIVITIES ✶

*Henry R. Carstens, M.D.,* president-elect of the Michigan State Medical Society, brought the greetings of the Michigan Medical Profession to the Michigan Pharmaceutical Association at its annual convention in Detroit, August 19.

* * *

*Richard Burke, M.D.,* of Palmer, and *Wm. H. Alexander, M.D.,* of Iron Mountain, were chosen as President and President-elect, respectively, of the Upper Peninsula Medical Society at its July meeting in Ironwood. The 1942 meeting will be held in Marquette.

* * *

*The Fourth Annual Forum on Allergy* will be held in Detroit, January 10-11, 1942. For program and details, write Jonathan Forman, M.D., 1005 Hartman Theatre Bldg., Columbus, Ohio.

* * *

*Frank L. Rector, M.D.,* Chicago, has been appointed as Field Representative in Cancer by the Cancer Control Committee of the Michigan State Medical Society, effective September 15. Dr. Rector will be under the joint sponsorship of the State Medical Society and of the Michigan Department of Health. Dr. Rector comes to Michigan well qualified by a wealth of experience and training, having served for many years as Field Representative for the American Society for the Control of Cancer. His work of informing the Michigan medical profession and educating the laity concerning cancer control should be filled with success.

* * *

*"Industrial Health Marches on:* Chairman's Address" by C. D. Selby, M.D., appeared in the *Journal of the American Medical Association,* issue of July 19, 1941.

F. P. Currier, M.D., Charles H. Frantz, M.D., and Ray Vander Meer, M.D., all of Grand Rapids, are authors of an article entitled "Reduction of Growth Rate in Gigantism Treated with Testosterone Propionate" which appeared in *The Journal, AMA,* issue of August 16, 1941.

* * *

*Polio Consultation Service.*—The Michigan Crippled Children Commission will again establish consultation service to doctors of medicine who desire same for cases or suspected cases of poliomyelitis where the family is financially unable to provide for this service. The

### ALL MEMBERS WELCOME AT DELEGATES' MEETINGS

Members of the Michigan State Medical Society are cordially invited to attend the special meeting of Delegates, Monday evening, September 15, 8:00 p.m., and the all-day session of Tuesday, September 16, beginning at 9:00 a.m.

The business of the Society is transacted by the House of Delegates. This body makes important decisions on matters affecting the daily practice of every doctor whose interest will be best indicated by his presence at Delegates' meetings.

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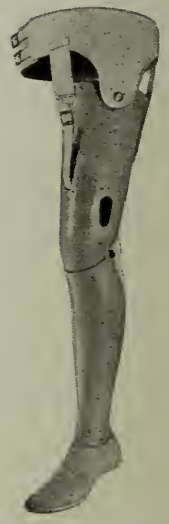

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**Detroit, Michigan** Cadillac 5093

doctor should contact the Secretary of his County Medical Society and request a consultant, indicating the consultant of his choice in that area. The Secretary will telegraph the Commission which in turn will notify the consultant authorizing consultation with the family physician.

If polio becomes prevalent in your community, inform the Commission immediately.

* * *

*Advise the editor* of your newspaper that you will be in Grand Rapids for the 76th Annual Meeting of the Michigan State Medical Society, September 17, 18, 19, 1941.

Bring your M.S.M.S. Membership Card, to facilitate registration.

The scientific and technical exhibit of 110 spaces is an educational opportunity of unusual interest and scope.

Remember the dates, September 17, 18, 19, 1941, Civic Auditorium, Pantlind Hotel, Grand Rapids.

* * *

*The Wayne County Medical Society's* courses in Anatomy, to be given at Wayne University College of Medicine, are as follows:

Section I—Back, Thorax and Abdomen—Sept. 10 to Nov. 26, 1941

Section II—Pelvis—Dec. 3 to Dec. 31, 1941

Section III—Extremities—Jan. 7 to Mar. 11, 1942

Section IV—Head and Neck—March 18 to June 3, 1942

* * *

*The Second American Congress on Obstetrics and Gynecology* will be held in St. Louis, Missouri, on April 6-10, 1942. Plans are progressing rapidly for the program. E. D. Plass, M.D., is Chairman of the Program Committee and Wm. F. Mengert, M.D., is Secretary. Chairmen of the subcommittees are as follows: Ralph A. Reis, M.D., Medical Section; Miss Georgia Hukill, Nursing Section; R. C. Buerki, M.D., Hospital Section; Edwin C. Daily, M.D., Public Health Section; and Clair E. Folsome, Educators Section.

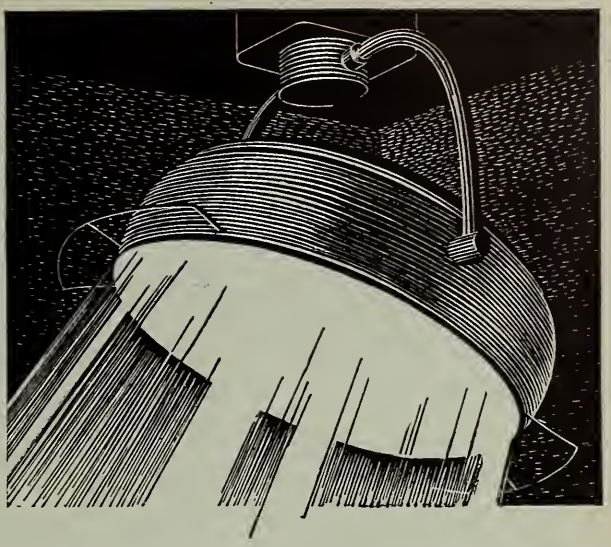
The Scientific and Educational Exhibits Committee is headed by H. C. Hesseltine, M.D., with Charles Galloway, M.D., as Secretary.

* * *

*Abraham Leenhouts, M.D.,* of Holland was honored by his brothers and sisters and close life-long friends on the completion of fifty years in the active practice of medicine and his 75th birthday, August 4. Doctor Leenhouts graduated from the University of Michigan Medical School and began practice in South Holland, Illinois. After three years he moved to Chicago where he practiced and took postgraduate work in eye, ear, nose and throat at Chicago University. In 1901 he came to Holland where he has practiced since. Last June Doctor Leenhouts was inducted into the Emeritus Club at the University of Michigan, an honorary society for graduates of fifty years.

* * *

*John A. Alexander, M.D.,* Ann Arbor, professor of surgery, University of Michigan Medical School, and surgeon in charge of the division of thoracic surgery at University Hospital, was awarded the Trudeau Medal of the National Tuberculosis Association. Doctor Alexander graduated at the University of Pennsylvania School of Medicine in 1916. He was president of the American Association for Thoracic Surgery in 1935 and of the Michigan Tuberculosis Association, 1938-39. He is author of "The Surgery of Pulmonary Tuberculosis" published in 1925 and of "The Collapse Therapy of Pulmonary Tuberculosis," 1937. He was awarded the Samuel D. Gross prize of the Philadelphia Academy of Surgery in 1925 and in 1930 the Henry Russell award of the University of Michigan was made to him.



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**Council and Committee Meetings**

1. Thursday, August 7, 1941—Executive Committee of The Council, Ann Arbor—4:00 p.m.
2. Friday, August 8, 1941—Maternal Health Committee Hotel Statler, Detroit—11 a.m.
3. Monday, September 8, 1941—Discussion Conference Leaders—Wardell Hotel, Detroit—6 p.m.
4. Sunday, September 14, 1941—Syphilis Control Committee—Pantlind Hotel, Grand Rapids—4 p.m.
5. Monday, September 15, 1941—The Council—Service Club Lounge, Pantlind Hotel, Grand Rapids—3:00 p.m.

**NOTICE**

The Michigan Crippled Children Commission is continuing the policy of restricting the removal of tonsils, and is confining approvals to cases complicating the following conditions:

Cervical T.B. adenitis
Chorea
Endocarditis
Mastoiditis
Otitis media (chronic)
Rheumatic fever

Also included in the restricted program are:

Hernia (except strangulated)
Circumcision
Adenoidectomy
Orchidopexy
Glasses

The approval of glasses is limited to post-operative eye afflictions such as strabismus and cataract.

*Attention,* physicians who treat men who have been injured while working for contractors on government work. The following bulletin was sent on July 24, 1941, to all contractors by the Office of Construction Quartermaster of the War Department:

"Effective this date you are instructed to direct all contractors and/or their insurance carriers, and through either or both of them, all civilian physicians to whom any of the contractors' employes may be sent for treatment on injuries sustained while at work, that tetanus antitoxin will not be administered to any such injured employe without first making the usual skin test to determine the patient's reaction to the serum. In the event that a positive reaction develops and antitoxin is still necessary, the patient shall be removed to a hospital for treatment indicated in the circumstances."

* * *

*All physicians* will receive in September an information card from the headquarters office of the American Medical Association asking for certain data for use in compiling the Seventeenth Edition of the American Medical Directory.

Physicians are urged to fill out these cards promptly and return them to the AMA in Chicago in order that the 1942 edition of the AMA Directory may be as accurate as possible. The Directory is one of the most important contributions of the American Medical Association to the work of the medical profession in the United States. It has been especially valuable in the medical preparedness program. Physicians are urged to state whether or not they are on extended active duty for the medical reserve corps of the United States Army and Navy. Cards should be filled out and returned promptly whether or not a change has occurred. Physicians who do not receive a card before October first should write at once to the AMA, 535 North Dearborn Street, Chicago, and request a duplicate.



*Say you saw it in the Journal of the Michigan State Medical Society*

*The Michigan State Pharmaceutical Association* is one of five associations which are sponsoring a series of institutional broadcasts over radio station WLW, Cincinnati. From September 15 to 28, inclusive, the following announcement which is of interest to all physicians will be made:

"The druggists of Ohio, Kentucky, Indiana, West Virginia, Michigan and other states invite you to always shop in their stores for the needs of your family.

"Harsh winter will be here shortly and your friendly druggist suggests that your family have a physical check-up by your physician to make sure that they are prepared for its rigors! Your druggist—always the dependable ally of your physician—will be glad to supply the vitamins or other strength-building items prescribed by the latter to assist in having a sickness-free winter.

"So—consult your physician soon—this foresight will add so much to your enjoyment of the good times throughout the holidays and later. Enjoy winter by keeping well and fit!"

* * *

### ASSOCIATE FELLOWS IN POSTGRADUATE EDUCATION

The following doctors of medicine are eligible for certificates of Associate Fellowship in Postgraduate Education, Michigan State Medical Society, 1941.

The State Society congratulates these physicians on their successful completion of the formal four years' continuation work arranged by the M.S.M.S. Committee on Postgraduate Medical Education. The certificates of award will be mailed to Fellows shortly after the State Society Convention in Grand Rapids.

Kent A. Alcorn, M.D., Bay City; William K. Anderson, M.D., Saginaw; John N. Asline, M.D., Essexville.

Ulysses S. Bagley, M.D., Saginaw; Robert Bailey, M.D., St. Clair Shores; William R. Ballard, M.D., Bay City; Paul H. Bassow, M.D., Ann Arbor; Harvey C. Bodmer, M.D., Kalamazoo; Leon C. Bosch, M.D., Grand Rapids; Lewis J. Burch, M.D., Mount Pleasant; Robert A. Burhans, M.D., Lansing; Earle J. Byers, M.D. Grand Rapids.

Elisha W. Caster, M.D., Mount Clemens; Henry G. Chall, M.D., Detroit; William E. Clark, M.D., Mason; Cecil Corley, M.D., Jackson.

Ernest W. Dales, M.D., Grand Rapids; Leon DeVel, M.D., Grand Rapids.

John M. Edmonds, M.D., Horton.

Joseph H. Failing, M.D., Ann Arbor; Foster A. Fennig, M.D., Marquette; John V. Fopeano, M.D., Kalamazoo; Wilbur W. Fosget, M.D., Lansing; William L. Foust, M.D., Grass Lake; Edson H. Fuller, Jr., M.D., Grand Rapids; Edward T. Furey, M.D., Detroit.

Henry C. Galantowicz, M.D., Detroit; John L. Gates, M.D., Ann Arbor; Cornelius J. Geenen, M.D., Grand Rapids; Joseph W. Gething, M.D., Battle Creek.

Herbert O. Helmkamp, M.D., Saginaw; S. Franklin Horowitz, M.D., Bay City.

Elwin B. Johnson, M.D., Allegan; Harrison H. Johnson, M.D., Allegan.

Alfred H. Keefer, M.D., Concord; Marceine D. Klote, M.D., Detroit.

Maurice J. Lieberthal, M.D., Ironwood; William R. Lyman, M.D., Dowagiac.

Charles L. MacCallum, M.D., Midland; Robert McGregor, M.D., Saginaw; J. Earl McIntyre, M.D., Lansing.

Edward H. Meisel, M.D., Midland; Clifton E. Merritt, M.D., Manton; Edward A. Miller, M.D., Berrien Springs; Neal R. Moore, M.D., Bay City; George F. Muehlig, M.D., Ann Arbor; Fred E. Murphy, M.D., Cedar; Scipio G. Murphy, M.D., Detroit.

Frank O. Novy, M.D., Saginaw.

James A. Olson, M.D., Flint; James J. O'Meara, M.D., Jackson; William J., O'Reilly, M.D., Saginaw.

Homer A. Phillips, M.D., Saginaw; Edward A. Pillsbury, M.D., Frankenmuth; Ray A. Pinkham, M.D., Lansing.

Lyle C. Shepard, M.D., Otsego; Joseph H. Sherk, M.D., Midland; Glenadine Snow, M.D., Ypsilanti; G. Howard Southwick, M.D., Grand Rapids; Ronald W. Spaulding, M.D., Gobles; Walter S. Stinson, M.D., Bay City; Arthur W. Strom, M.D., Hillsdale; Harold C. Swenson, M.D., Grand Rapids.

Clifford B. Taylor, M.D., Albion; Pius L. Thompson, M.D., Grand Rapids; Alfred A. Thompson, M.D., Mount Clemens; John Trudeau, M.D., Rogers City; Ray V. Tubbs, M.D., Blissfield.

Edwin P. Vary, M.D., Flint.

Lee E. Westcott, M.D., Kalamazoo; George B. Wickstrom, M.D., Munsing.

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*The Academy of Ophthalmology and Otolaryngology* will hold its 46th annual meeting at the Palmer House, Chicago, October 19-23, 1941. Frank R. Spencer, M.D., Boulder, Colo., is president of the Academy. A feature of the meeting this year will be a symposium on vertigo with Francis H. Adler, M.D., Philadelphia, representing ophthalmology; Wm. J. McNally, M.D., Montreal, representing otolaryngology; and Bernard Alpers, M.D., Philadelphia, representing neurology. Among the papers to be presented during the week will be the following: "Surgical Treatment of Vascular Diseases of the Orbit" by Alfred W. Adson, M.D., Rochester, Minn.; "Allergy and Ophthalmology" by Albert N. LeMoine, M.D., Kansas City; "Operative Results in 200 Cases of Convergent Strabismus" by John H. Dunnington, M.D., and Maynard Wheeler, M.D., New York; "Otolaryngological Problems and the Weather" by W. F. Petersen, M.D., Chicago; "The Problem of Preventing Partial or Total Loss of Vision in Glaucoma Patients of Eye Clinics" by Mark J. Schoenberg, M.D., New York; "Practical Uses of Chemotherapy in Ear, Nose and Throat Work" by Charles T. Porter, M.D., Boston; "Treatment of Sinus Diseases in Children" by Alfred J. Cone, M.D., St. Louis; "The Use of Urea in Certain Diseases of the Ears, Nose and Throat" by Rea E. Ashley, M.D., San Francisco; and "What Otologists Can Do For Defective Hearing" by Frederick T. Hill, M.D., of Waterville, Maine.

Perry Goldsmith, M.D., professor of otolaryngology in the University of Toronto, Faculty of Medicine, will be the academy's guest of honor this year.

Officers of the academy in addition to Doctor Spencer are Ralph Irving Lloyd, M.D., Brooklyn, President-elect; Everett L. Goar, M.D., Houston, Texas; James Milton Robb, M.D., Detroit, and Ralph O. Rychener, M.D., Memphis, vice presidents; and Secord H. Large, M.D., Cleveland, comptroller, Wm. P. Wherry, M.D., Omaha, is executive secretary-treasurer.

## INTERNATIONAL ASSEMBLY

This year's International Assembly of the Inter-State Postgraduate Medical Association of North America will be held in the public auditorium, Minneapolis, Minnesota, October 13, 14, 15, 16 and 17.

The high standing of the medical profession of Minneapolis, combined with the unusual clinical facilities of its great hospitals and excellent hotel accommodations, make this city an ideal place in which to hold the Assembly.

The officers of the Inter-State Postgraduate Medical Association, those of the Hennepin County Medical Society and the Minnesota State Medical Association, extend a very cordial invitation to all members of the profession in good standing to attend the Assembly.

A full program of scientific and clinical sessions will take place each day and evening of the Assembly, starting at 8:00 o'clock in the morning.

In coöperation with the Hennepin County Medical Society, the Minnesota State Medical Association and the Minneapolis Civic and Commerce Association, a most excellent opportunity for an intensive week of postgraduate medical instruction is offered by approximately eighty-five distinguished teachers and clinicians from different parts of the United States and Canada who are honoring the Assembly by contributing to the program. The speakers and subjects have been carefully selected by the program committee.

Pre-assembly and post-assembly clinics will be conducted, free of charge, in the Minneapolis hospitals on the Saturdays previous to, and following the Assembly, for visiting members of the profession.

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The registration fee for the scientific and clinical sessions will be $5.00.

Members of the profession who can possibly arrange to attend the Assembly cannot afford to miss it.

With a great deal of pride and satisfaction, we call your attention to the list of distinguished teachers and clinicians who are to take part on the program and whose names appear on page 743 of this JOURNAL.

ROSCOE R. GRAHAM, President, Toronto, Canada.

GEORGE W. CRILE, Chairman, Program Committee, Cleveland, Ohio.

WILLIAM B. PECK, Managing-Director, Freeport, Ill.

## In Memoriam

**J. William Gustin** of Bay City was born in 1876 and was graduated from the Detroit College of Medicine in 1903 and the University of London, Ontario. Dr. Gustin retired two years ago because of ill health. He died in Billings Hospital, Chicago, Illinois, on July 21, 1941.

* * *

**Hermon Harvey Sanderson** of Detroit was born in Sparta, Ontario, in 1869. He was graduated from Toronto University in 1892 and began practice with his father, Robert Lyon Sanderson, M.D., in Sparta, Ontario, where he remained one year, then moved to Windsor, where he practiced until 1912 and then moved to Detroit. He studied in London, England, and Vienna, preparing for his specialty of eye, ear, nose, and throat. He was chief of the Department of Ophthalmology at the Harper Hospital for many years. He was a member of the American College of Surgeons and an honorary member of the Detroit Ophthalmological Club. Doctor Sanderson died July 1, 1941.

* * *

**G. Reginald Smith** of Port Huron was born in Carsonville, Michigan, in 1881 and was graduated from the Detroit College of Medicine in 1903. During the World War, Doctor Smith served as assistant to Angus McLean, M.D., who established Harper Unit No. 7 in France. Doctor Smith was past president of the St. Clair County Medical Society. He died July 21, 1941, in Harper Hospital, Detroit.

* * *

**Claude W. Walker** of Iron Mountain was born near Scranton, Pa., in 1876, and was graduated from the University of Pennsylvania Medical School in 1901. He took advanced work in eye, ear, nose and throat at the New York Postgraduate College and at Johns Hopkins University. Later he practiced medicine at Schenectady, N. Y., Milwaukee and Green Bay, Wisconsin. Doctor Walker enlisted as a lieutenant in the U. S. Army Medical Corps in 1917. He served overseas and was promoted to the rank of major. Returning to the United States after the Armistice he received his honorable discharge in 1919. In 1920 Dr. Walker established an office in Iron Mountain where he practiced until the time of his tragic death. Dr. Walker together with Mrs. Walker was killed when his auto crashed on his return trip from the Upper Peninsula Medical Society Meeting on July 18.


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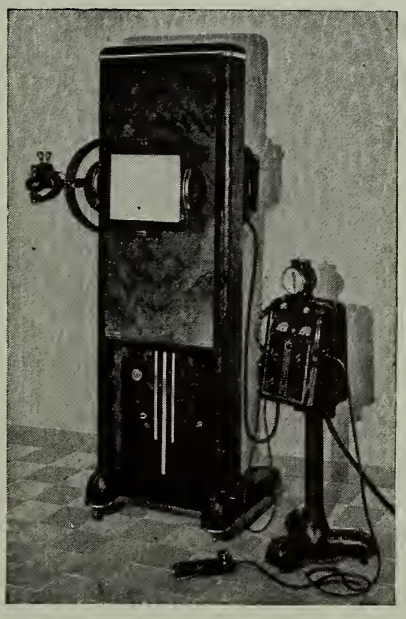

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*Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

A PRIMER FOR DIABETIC PATIENTS. An Outline of Treatment for Diabetes with Diet, Insulin and Protamine-Zinc Insulin Including Directions and Charts for the Use of Physicians in Planning Diet Prescriptions. By Russell M. Wilder, M.D., Ph.D., F.A.C.P; Professor and Chief of the Department of Medicine of the Mayo Foundation, University of Minnesota; Head of Section on Metabolism Therapy, Division of Medicine, the Mayo Clinic. Seventh edition, reset. Philadelphia and London: W. B. Saunders Company, 1941. Price: $1.75.

Russell M. Wilder, the Head of the Section on Metabolism Therapy at Mayo Clinic, has presented the seventh edition of this primer originally published in 1921. As he states, this new edition is "required to describe an improvement in the procedure of administering protamine-zinc insulin." His rather liberal diets and the use of both protamine-zinc and regular insulin in the one syringe have made the care of these patients more effective and simpler. The major part of the book consists of the directions furnished to the patient who visits the service of Doctor Wilder.

———MSMS———

INFANTILE PARALYSIS. Anterior Poliomyelitis. By Philip Lewin, M.D., F.A.C.S.; Associate Professor of Bone and Joint Surgery, Northwestern University Medical School; Professor of Orthopedic Surgery, Cook County Graduate School of Medicine; Attending Orthopedic Surgeon, Cook County and Michael Reese Hospitals; Consulting Orthopedic Surgeon, Municipal Contagious Disease Hospital, Chicago. Illustrated by Harold Laufman, M.D. Philadelphia and London: W. B. Saunders Company, 1941. Price: $6.00.

The author has written this book especially for the family physician who usually sees the patient first and who may be somewhat confused by the numerous reports and articles which have appeared on this subject. The major part of the book, of course, deals with the physical therapeutics and surgical procedures necessary to restore function to the paralytic patient. It is profusely illustrated and complete though compact.

———MSMS———

CLINICAL AND EXPERIMENTAL INVESTIGATIONS ON THE GENITAL FUNCTIONS AND THEIR HORMONAL REGULATION. By Bernard Zondek. Baltimore: The Williams & Wilkins Company, 1941. Price: $4.50.

This monograph presents a continuation of the previous research work done by Zondek which was published in German in 1931 and 1935 entitled, "The Hormones of the Ovary and the Anterior Pituitary Lobes." While like most reports of research work and clinical experimentation this book is not very readable, to the physician who is interested in sex hormones the material is markedly informative and for this group this book is recommended.

———MSMS———

COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION. Edited by Richard M. Hewitt, B.A., M.A., M.D.; Harry L. Day, Ph.B., M.D.; James R. Eckman, A.B.; A. B. Nevling, M.D.; John R. Miner, B.A., Sc.D.; and M. Katharine Smith, B.A. Volume XXXII—1940. Philadelphia and London: W. B. Saunders Company, 1941. Price: $11.50.

This is the 1940 edition in which the material, which is of particular interest to the general practitioner, the diagnostician and the general surgeon, is assembled from the writings of the staff of the Clinic and Foundation. Here are seventy-three complete reprints, ninety-one abridged papers and one hundred five abstracts. The general quality of the material cannot be questioned and it is voluminous. The section on military medicine is of particular current interest. This volume is recommended as an encyclopedic review of the literature of 1940. The typography is excellent and it is well illustrated.

*(Continued on page 757)*


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START TODAY. Your Guide to Physical Fitness. By C. Ward Crampton, M.D., Major, Medical Reserve Corps, United States Army, Formerly Director of the Department of Physical Education and Hygiene, New York Board of Education; Organizer and Director Health Service Clinic and Assistant Professor of Medicine, Post Graduate Medical School and Hospital; etc. New York: A. S. Barnes and Company, 1941. Price: $1.75.

The author was formerly Director of the Department of Physical Education and Hygiene of the New York Board of Education. He begins with a discussion of what constitutes physical fitness and of what a medical examination should consist. In the body of this book he relates in an interesting manner the method and purpose of seven exercises which he feels would keep the average citizen from "going soft." The exercises are simple, easy, and well-planned. It would be difficult for any physician to read through this book and not feel urged to adopt this system of exercise for his own. This book is recommended for the physician's private and professional use.

———MSMS———

INFANTILE PARALYSIS. A Symposium Delivered at Vanderbilt University, April, 1941. New York: The National Foundation for Infantile Paralysis, Inc., 1941.

The six lectures delivered at Vanderbilt University in April, 1941 under the auspices of the National Foundation for Infantile Paralysis are presented for the edification of all interested in this disease. The "History of Poliomyelitis" which was delivered by Paul Clark of Wisconsin is most interesting and instructive. Frank R. Ober's lecture on the "Treatment and Rehabilitation of the Poliomyelitis Patient" is practical and should be of distinct help to the practitioner who has in his hands the care of these patients. The material is briefly put and practical.

———MSMS———

X-RAY THERAPY OF CHRONIC ARTHRITIS (Including the X-ray Diagnosis of the Disease). Preliminary report based on 100 patients treated at Quincy, Illinois. By Karl Goldhamer, M.D.; Associate Roentgenologist, St. Mary's Hospital and Quincy X-ray and Radium Laboratories; Formerly Roentgenologist, University of Vienna; Honorary Member, Mississippi Valley Medical Society; etc. With a Foreword by Harold Swanberg, B.S., M.D., F.A.C.P.; Editor, *Mississippi Valley Medical Journal* and the *Radiologic Review;* Roentgenologist, St. Mary's Hospital and Blessing Hospital; Director, Quincy X-ray and Radium Laboratories; Past President, Illinois Radiological Society, etc. With 24 original illustrations by the author, two roentgenograms, and four tables. Quincy, Ill.: Radiologic Review Publishing Company, 1941. Price: $2.00.

Goldhamer, Chief of the Roentgen Laboratory of the First Anatomical Institute of the University of Vienna, became enthusiastic about the possibilities of x-ray therapy of chronic arthritis. He calls attention to the fact that there are probably seven million sufferers from arthritis in the United States and the excellent results which he has obtained by roentgen therapy, in a series of one hundred, led him to suggest to the practitioner the advisability of giving the arthritis patient the benefit of this treatment. Over half of the patients who had hypertrophic arthritis were markedly improved or symptom-free after treatment and the same was true of hypertrophic spondylitis. Atrophic arthritis and atrophic spondylitis showed about the same results. The results of all cases showed almost sixty per cent markedly improved or free from symptoms. The technic and course of treatment is described in this monograph.

———MSMS———

PLAY FOR CONVALESCENT CHILDREN. In Hospitals and at Home. By Anne Marie Smith, Staff Instructor, Leaders' Training School, Community Recreation Service, Chicago, Illinois. New York: A. S. Barnes & Company, 1941. Price: $1.60.

In the present day program of highly organized recreation this book should play a definite part. The activities outlined in this volume would undoubtedly serve the purpose of making more pleasant the child's stay in the hospital.


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—MSMS—

NEWS NOTE

*Louis J. Gariepy, M.D.,* Detroit, was honored at an Indian Fete held at Harbor Springs July 27 by the Ottawa Indians. Doctor Gariepy was given the Indian name of "Say-ge-mah" which means "Man of Medicine" in appreciation of his assistance to the Holy Childhood School for Indian children at Harbor Springs.

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## MICHIGAN MEDICAL SERVICE

A report of seventeen months of operation of Michigan Medical Service was presented at the Second Annual Meeting of the members of Michigan Medical Service in Grand Rapids on September 17. This report contained many items of real interest to doctors who have made possible the inauguration of the professionally controlled nonprofit medical service program.

*Enrollment.*—The total enrollment as of August 31 was 193,176 persons, which represents the coöperation of 501 groups. The steady increase in enrollment is an indication of the favorable reception given by the public to the doctors' own medical service program.

*Services to Subscribers.*—During the seventeen months, services were provided for 28,815 patients, representing an amount of over $650,000 of medical expenses met through the prepayment program rather than by the individual patients.

A tremendous amount of valuable data relative to incidence of illness, frequency of medical and surgical procedures, and costs of medical care has been accumulated. These data, based on more than 130,000 years of exposure (time during which subscribers were entitled to services) is far greater than the information on which the reports of the Committee on the Costs of Medical Care (costing in excess of $1,000,000) were based!

*Payment to Doctors.*—For thirteen consecutive months, the full Schedule of Benefits was paid for all services rendered. A combination of an increased volume of services and late reporting on the part of the doctors made it necessary, beginning in April, to pay on a prorated basis of 80 per cent of the previous level of payments, pending a determination of the total cost of services for the particular month compared with the income from subscribers. The payment of the amount reduced will be dependent on funds available for the particular month, after determination of the cost of services can be made (when all late reports are received) and on those surpluses which may be accumulated during later months.

**MICHIGAN MEDICAL SERVICE REGISTRATION**
**(As of September 10, 1941)**

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There is an erroneous impression that the medical service program will mean a financial loss to the doctor when comparison is made of the benefits paid in one particular case with the probable charge that might have been made. What has been overlooked is the important fact that the benefit paid under the medical service program for a series of cases means total re-

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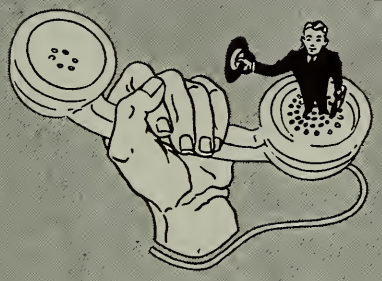

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*Financial Experience.*—The financial records of Michigan Medical Service must necessarily be tentative until proper accounting can be made for outstanding, incomplete, and unreported services. A liberal allowance of $161,202.27 has been made as a measure of the probable cost of such services. Whether this fund will be exhausted when all services are reported is problematic. Considerable improvement of the financial situation is expected on the basis of a decrease in service costs because of (1) a seasoning of the groups enrolled, since an analysis of groups shows that during the first five months there is an excess of service costs over income, but that after a period of twelve months' enrollment the income is more than sufficient to provide for the costs of services; (2) the more favorable period of the year, since it is well established that the period from September to January shows less surgical care than the balance of the year; (3) decrease in the percentage of administration expenses because of the large volume of enrollment. The relatively low administration expense of 20 per cent has been *reduced to between 12 and 13 per cent* during the months of June and July because of the large enrollment.

*Registration of Doctors.*—It is particularly noteworthy that the number of doctors registered with Michigan Medical Service has increased month by month. Likewise, but few doctors have resigned because of misunderstanding. A total of 3,559 doctors were registered as of August 31; 75 applications received were withdrawn for the following reasons: Death, 38; moved out of the state, 9; pending county medical society action, 7; amount of fees, 11; arrangements for specialists' fees, 4; and pro ration, 6. The present number of doctors participating is at least 80 per cent of the total possible number of practicing physicians.

*Organization.*—The prime consideration of the administrative organization of Michigan Medical Service has been economy in order that the fund collected from subscribers might be utilized fully for medical and surgical services. Michigan Medical Service has reported their lowest administrative cost for any comparable program. The accomplishment of this economy has been possible through the loyalty and extra long hours of work on the part of the office employes whose salaries are minimal. Likewise, the unselfish services of the members of the several committees have been a large factor in keeping administrative costs down. To some extent the necessity for economy has hampered efficiency, but the office procedures are now well organized, with many functions transferred to International Business Machines, which greatly facilitate the prompt handling of reports from doctors and the remitting of payments.

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**MEDICINE**—Two Weeks' Intensive Course in Internal Medicine and Two Weeks' Course in Gastro-Enterology will be offered twice during the year 1942, dates to be announced. One Month Course in Electrocardiography and Heart Disease every month, except December.

**FRACTURES & TRAUMATIC SURGERY**—Two Weeks' Intensive Course will be offered four times during the year 1942, dates to be announced. Informal Course available every week.

**GYNECOLOGY**—Two Weeks' Intensive Course will be offered four times during the year 1942, dates to be announced. Twenty Hour Personal Course in Vaginal Approach to Pelvic Surgery November 3rd. Clinical and Diagnostic Courses every week.

**OBSTETRICS**—Two Weeks' Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.

**OTOLARYNGOLOGY**—Two Weeks' Intensive Course will be offered twice during the year 1942, dates to be announced. Clinical and Special Courses starting every week.

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J. H. CARSTENS, M.D.
Detroit, Michigan

*(You will understand, Mr. Chairman, why I made the emphatic remarks I did, when I say to you it was simply to take the sharp edge off, which will come after I read this paper. I have no doubt Dr. Green will give me particular Hail Columbia; but there were no cases that we operated upon for the purpose of making women sterile. I do not believe that there is a member of the regular medical profession who operates in any such cases.)*

---

Understanding by laparotomy any operation requiring the opening of the peritoneal cavity, I thought that the report of a few cases might be interesting to this Section, especially as it includes different operations of this kind. The reports of the following cases I have made as brief as possible, perhaps too much so, but I desired to keep within the twenty-minute limit.

*Case 1.*—Mrs. K., aged thirty-three, sterile, sent to me by Dr. Root, of Monroe. She imagined, or rather hoped, she was pregnant, but Dr. Root had properly diagnosed a large multilocular cyst. January 8, I operated at her home in Monroe, assisted by Drs. Root, West, Valade, Gregory, and Baur. The fluid was very thick, some of the cyst wall very thin and ruptured, some adhesion to intestines; right ovary, also cystic, removed. Abdomen, flushed with sterilized water and closed. Recovery rapid, no rise of temperature above 100°.

*Case 2.*—Mrs. M.F.W., aged twenty-six, no children, but one miscarriage three years before; since ailing; has been treated by douches and applications to uterus, also wore pessary. Examination revealed an enlarged adherent ovary in cul-de-sac, right ovary also large, tubes distended, and everything in pelvis very painful; has had no connection for one year, on account of pain. She has also had a slight attack of peritonitis, so that I made the diagnosis of salpingitis, probably of gonorrheal origin. I sent her to Harper Hospital, and operated January 15. Both tubes contained about one-half ounce pus each, ovaries adherent to uterus, bladder, and rectum. All removed and abdomen flushed. A large glass draining tube down to cul-de-sac was left in lower angle of wound. Recovery quick, no rise of temperature. Glass tube removed on the second day, and rubber tube inserted for two days more. Two weeks after, wound perfectly closed, patient feeling splendid, and all pelvic pain gone. She was sent home on the 16th day.

*Case 3.*—Miss C., aged thirty-three, had been operated upon for salpingitis two years ago in Canada. During November was taken with a scaly skin disease and went to Harper Hospital under the care of Dr. Carrier. She had a sudden elevation of temperature, up to 109° the latter part of the month. This was repeated every few weeks, the temperature going up to 110° at times, and in a day or two would go down to about normal. About January 1 the temperature went up and stayed up from 106° to 110°, with severe abdominal pain and symptoms of peritonitis. The question of septicemia or central nervous lesion came up. Many physicians saw her, some inclined to exploratory laparotomy, others thought it would be of no avail. The patient was clamoring for a laparotomy, and after consultation, an exploratory laparotomy was made January 17. Absolutely nothing was found. The temperature dropped to normal, and the wound healed without a bad symptom. January 27, she was apparently well and going around the halls. February 4, temperature up to 109.9° for a short time. What was it? Hysteria? I give it up.

*Case 4.*—Mrs. Hess, aged thirty-nine, no children. Has been sick with high fever and constant vomiting for three days; complains only of pain in the abdomen. I suspected intestinal obstruction, but could not find any; accidentally my finger came below Poupart's ligament, and there I found it—femoral hernia. I sent her to Harper Hospital and operated February 4, in the usual manner, except that a radical operation was made by excision of the sac and uniting the pillars with silk. The wound was closed by the buried animal suture. Union perfect, and patient discharged on the fourteenth day. Today she seems perfectly cured of her hernia.

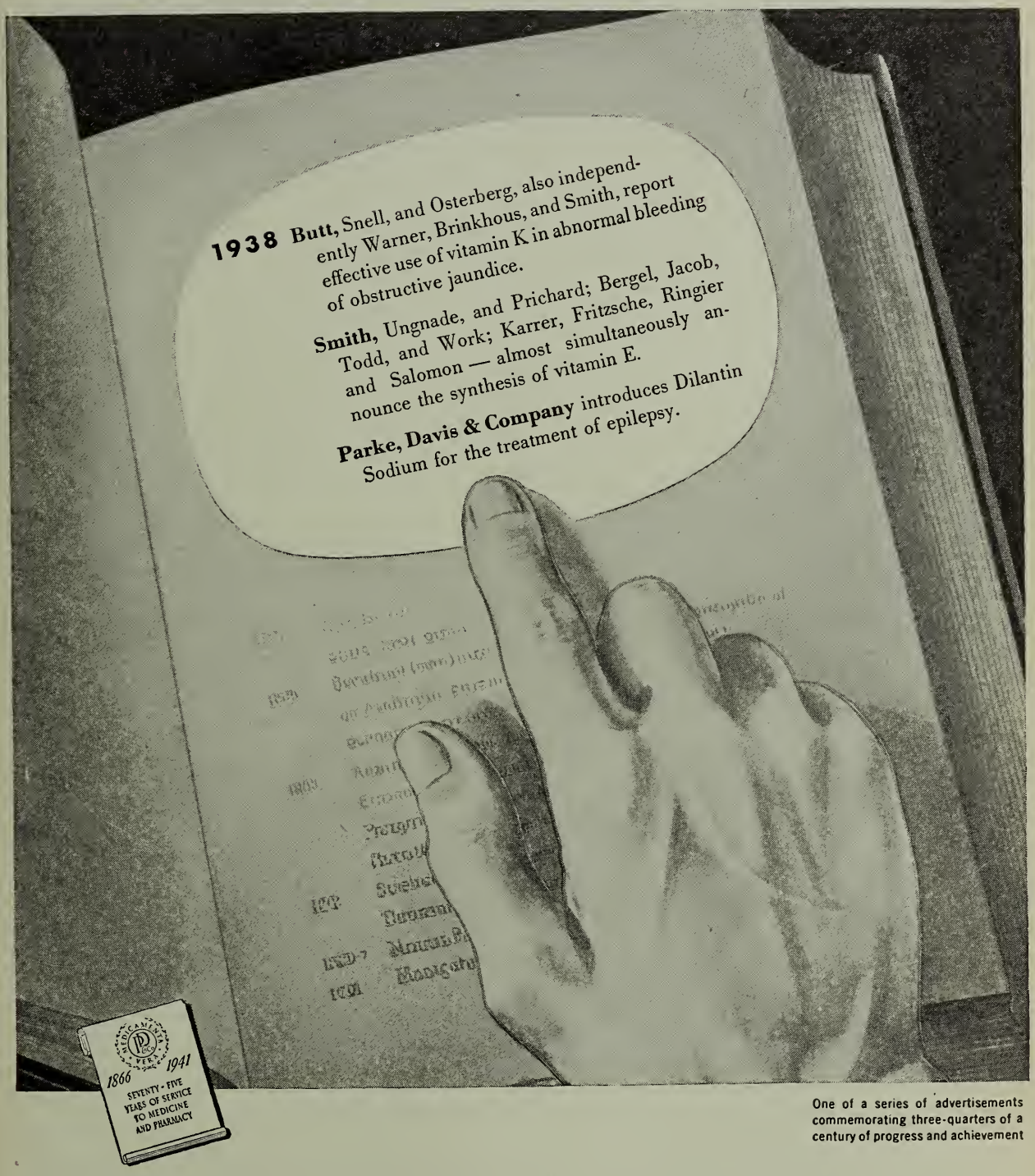
*Case 5.*—Mrs. P., aged thirty, mother of two children. For three months had metrorrhagia, at times quite profuse. Uterus four inches deep and degeneration apparently of mucous membrane. Under chloroform was thoroughly curetted and cauterized with carbolic acid. While under the influence of chloroform I found a firm tumor in right pelvis, about two and one-half inches in diameter; laparotomy decided upon after recovery from anemia and the other operation. February 6, at Harper Hospital, operated in the usual manner; right tube enlarged and ruptured, partly filled with blood and placental tissue: all removed, also left tube and both ovaries. A case of extra-uterine pregnancy, recovered rapidly, and was sent home on the thirteenth day quite well.

*Case 6.*—Mrs. R., aged forty, mother of five children, last, five months ago. Sick ever since, abdominal tumor, probably pyosalpinx and pelvic abscess. Operation at Harper Hospital February 7. Right tube contained pus; this and right ovary removed. Left side one solid mass encircling the rectum; diagnosis, sarcoma. This I left severely alone, put in a drainage, and closed the abdomen. Recovery rapid, and without a bad symptom. The sarcoma will probably end her life in a few months.

*Case 7.*—Mrs. F.B.W., aged twenty-one, married one and one-half years, no children, backache for years, worse after menstruation, which is regular, but profuse; leucorrhea. Examination revealed enlarged right ovary and tube in the cul-de-sac, probably a result of a severe fall five years ago. Operation at Har-

*Presented at the twenty-sixth annual meeting of the Michigan State Medical Society, Saginaw, June, 1891.

# *THESE NAMES, THESE YEARS...*
# *HAVE HELPED MAKE MODERN MEDICAL HISTORY*

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per Hospital February 10. Both tubes full of pus, and ovaries enlarged and adherent. All removed; some adhesion to intestines caused slight trouble; abdomen closed; recovery uninterrupted, except slight abscess along the course of one suture. Sent home on the sixteenth day.

*Case 8.*—Mrs. L. was sent to Harper Hospital from Pontiac, aged twenty-five, no children, but one miscarriage five months ago; since ailing; constant elevation of temperature to 99.5°. On examination I found a large fluctuating mass in the pelvis. Operated February 12. The right tube was full of pus and congenitally closed, giving it a club-shaped appearance, about five inches long and one inch at its thickest end; this and ovary removed. The left broad ligament and surrounding tissues were one large abscess, this was opened thoroughly; the abdomen flushed repeatedly; a drainage tube inserted, and the abdomen closed. Recovery rapid; tube allowed to remain for two weeks; patient sent home the fourth week perfectly recovered. A letter lately received states that she has gained 19 pounds. Never felt better in her life, a good result from an unpromising case.

*Case 9.*—Mrs. L., aged fifty-eight, two children, 30 years ago. Always quite well. Menopause two years ago. Never any uterine disease. About three months ago noticed an odorous discharge from vagina, sometimes streaked with blood. She had a slight laceration. The history was very suspicious, and I removed a small part of the raw surface for microscopic examination. Dr. Duffield pronounced it cancer. This is as early a case as I ever saw, and vaginal hysterectomy was clearly indicated. February 27, at Grace Hospital, the operation was performed in the usual manner, using the clamp forceps for the broad ligaments. She had less shock than I ever saw in such a case. Temperature never went above 100.2°. The clamps were removed in fifty-five hours. No bad symptoms except slight tympanitis ever developed. Today, nearly four months after the operation, she is perfectly well.

*Case 10.*—Mrs. H., aged twenty-eight, mother of two children, has been gradually getting more nervous. Subject to neuralgia, rheumatism, indigestion, constipation, headache, et cetera. A year ago I found a retroverted lacerated cervix; left ovary enlarged. As an experiment, sewed the cervix without much improvement, nor did pessaries, tampons, douches, help her. I tried this to satisfy her husband who was a physician. I then saw that only by removal of the diseased ovaries and the establishment of the menopouse could a radical change for the better be brought about. She readily consented. She was taken to the sanitarium. Operated March 9 in the usual manner. Lack of asepsis was the cause of a small superficial abscess, which, however, soon healed. She was discharged on the 16th day, already wonderfully improved. Today she is quite well; has not enjoyed such health for years.

*Case 11.*—Miss E., aged twenty-nine, for years suffered from profuse and painful menstruation every month; she was confined to bed for four to ten days. I found fungosities; thoroughly curetted, and cauterized mucous membrane of uterus. The next month she was better, but the second as bad as ever. After four such operations she and I became discouraged and she consented to removal of the ovaries. Operation at Harper Hospital March 31. Plain, simple case; recovery rapid. Sent home on the thirteenth day.

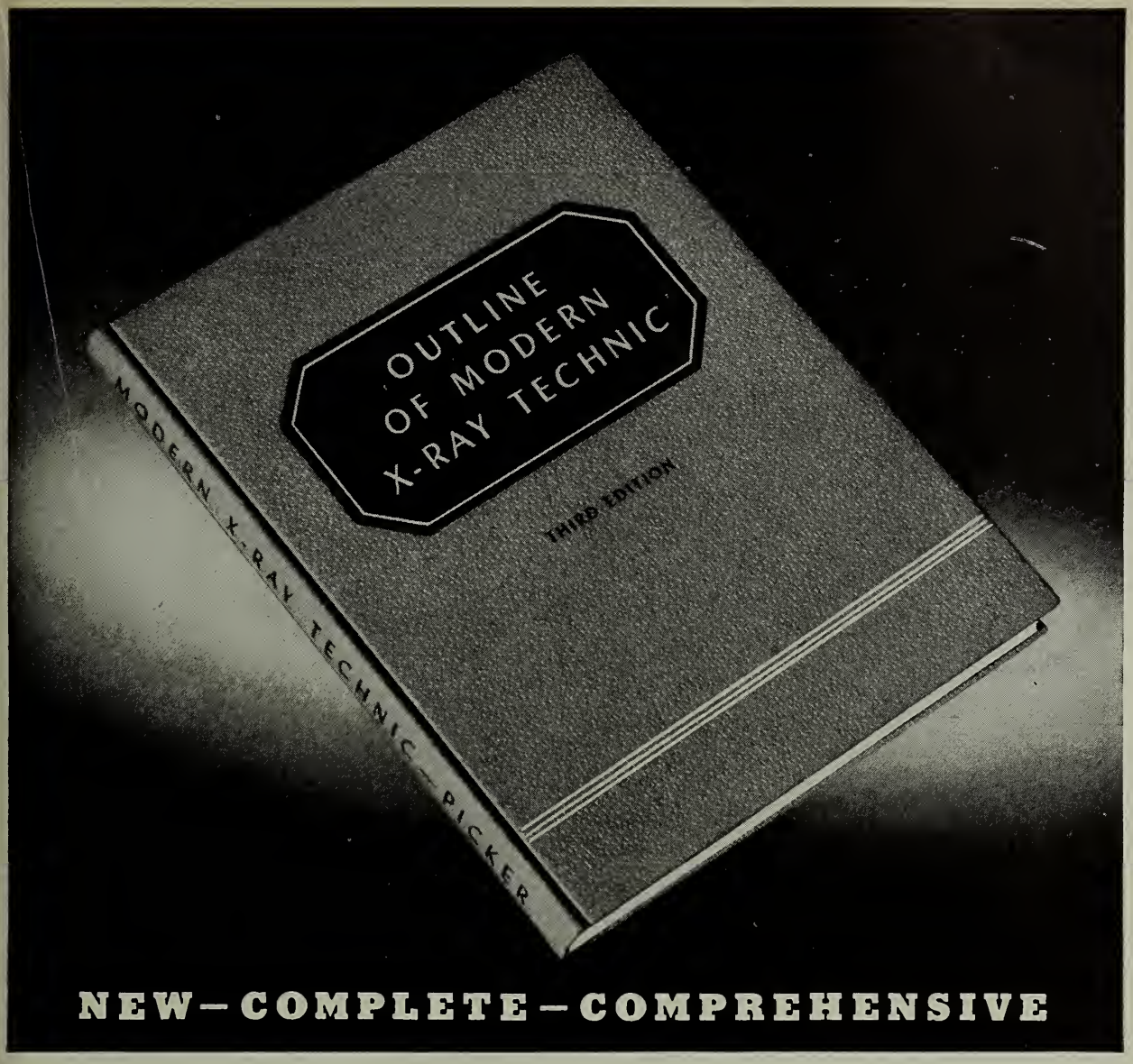
*Case 12.*—Mrs. V., aged thirty, mother of two children, youngest 7 years; one miscarriage. For five years has suffered from painful congestive dysmenorrhea and menorrhagia, dyspepsia, palpitation, painful coition, et cetera. On examination I found a displaced ovary; uterus retroflexed. As she was anxious to have more children, I tried a stem and retroflexion pessary for some time. Although the uterus was straight and nearly in its proper position, she did not become pregnant, and after a year's treatment she was worse than ever and I decided upon a laparotomy. She readily consented and entered Harper Hospital April 2. The operation was done in the usual manner. The left tube contained pus, ovary enlarged and cystic; both removed. The other ovary and tube could not be found, although I explored the pelvis well. Did she have only one tube and ovary? As the abdomen was clean, no tube was used, but it was closed in the usual manner. The shock was profound and vomiting constant, temperature ran up to 103° on the second day and then declined to about 99°. The pulse steadily increased to 120, then to 150, and rose until it could not be counted. The patient could retain nothing, and finally died of heart failure on the fifth day. Was this septic poisoning? I do not think so, as I removed this patient from the table immediately, and operated on the next case, which made a splendid recovery.

*Case 13.*—Mrs. A., aged thirty, menstruated first at fourteen, very painful; married at seventeen years; only child at twenty-four years of age, severe labor. Since, painful and profuse menstruation, so as to be obliged to stay in bed from one to ten days every month. Ovaries inflamed and cul-de-sac adherent. Operation April 2 at Harper Hospital. Recovery without a bad symptom; discharged on the thirteenth day.

*Case 14.*—Mrs. D., aged twenty-seven, mother of one child seven and one-half years old; since ailing, painful and profuse menstruation; right ovary enlarged, left tube filled with fluid. Has been treated for years with douches, applications, et cetera. I wanted to watch her for a few days—fatal delay—the left tube ruptured and so-called pelvic cellulitis developed. By prompt treatment the acute symptoms disappeared and she seemed so well that I thought a week or two of tonic treatment would prepare her for an operation. Procrastination was nearly the thief of a life; a second rupture occurred, which nearly ended her life. I lost no time and sent her to Harper Hospital. Operated April 9. Left tube filled with pus, left ovary contained an abscess in the center, which ruptured during its removal; right tube and ovary also diseased and removed. Abdomen flushed. Drainage tube three days. Recovery complete. Now rides a bicycle ten miles every day.

*Case 15.*—Mrs. W., aged forty-six, mother of children. Has suffered from uterine disease for years and been treated ad infinitum. Has been operated upon for piles. I was called to see her by the kindness of Dr. Jamieson. Found a large fluctuating mass in right iliac fossa, also hard nodular mass like glands in groin. Patient weak and with an irritable stomach. We decided on an exploratory laparotomy. I sent her to the sanitarium. Operation April 10, in the usual manner. Removed both tubes filled with pus. Also found large nodular mass in pelvis, but did not try to remove it, only a small piece for microscopic examination. Flushed abdomen. I introduced drainage tube, patient vomited continually, and only partially rallied, the pulse increased in rapidity until death took place on the second day. The microscope revealed a spindle-celled sarcoma.

These operations were not made for a record, but every case was operated upon which seemed to offer hope, and every patient was given the benefit of an operation, if it was indicated. Some of the most hopeless cases recovered and now enjoy good health. I have reported every case operated upon during this time, and have not selected my cases. Since my return from

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*Say you saw it in the Journal of the Michigan State Medical Society*

Europe, September 1 to January 1, 1891, to wit: four months, I operated on nine cases with one death (sarcoma). Add these to the others, would be a total of 24 laparotomies in eight months, with three deaths, or a fraction over 12 per cent, two deaths being due to malignant disease and one due to heart failure (or sepsis).

*Discussion*

Dr. Carstens (closing): I think there is nothing more to be said about this matter. The history of my cases, every one of them, shows that this very plan of treatment advocated by Dr. Leonard has been pursued for years and years without any beneficial results; and I will lay that down as an absolute rule, that every other means at our disposal ought to be tried before we decide on a laparotomy. I lay down as another rule this, that healthy ovaries cannot cause any disease, not even reflex nervous symptoms; that you must only operate on diseased ovaries and diseased tubes. I know also that once in a while those cases Dr. Leonard speaks of get well; I know they do. I have seen cases, but I never know whether they do or not in bad cases, and his statistics there show that some of those women came near dying when they were fooling around with them. I say, give them the benefit of some other kind of treatment. The operation itself is not very dangerous.

As Dr. Nancrede says, you have to draw the line between these cases. I think some of these cases of Dr. Leonard's have got well, but I know some cases of Dr. Leonard's have passed into the hands of those who use the knife and have cured the patient by laparotomy. That is the way the question stands with me. I give them the benefit of every possible plan of treatment, and I don't remove any healthy ovaries, no matter what the disease or symptoms are, unless I am satisfied there is some real disease. I am not inoculated with that disease they have over in Germany, to operate for everything, and I operate only as a last resort. I think sometimees, as Dr. Nancrede says, we wait too long, until it is too late before we operate. We never hear anything about these cases of pus tubes in the abdomen which die, which are called enteritis, which are buried and are now six feet beneath the sod—we never hear anything about those cases, but when we pick up some poor laparotomy case, where the patient dies, we are generally jumped on for that.

The question of insanity, melancholia, and so on. Mr. President, I don't want to listen to. I can show you right here, within a stone's throw of this building, the first case of that kind ever operated upon here, twelve years ago. She had fits, she had everything, she was a physical wreck, and ever since her ovary has been removed she has been a happy wife and the mother of two children—step-children of course—and only a few weeks ago she called on me to thank me for what I had done. I can show you a half dozen other women, operated on five or six years ago, who were at that time physical and mental wrecks, and are now the very pictures of health. So you don't always have this followed by melancholia. We have women suffering from melancholia who have never had their ovaries removed. We don't insure the patient that she is not going to break her leg or become insane because we operate on her. It is not assumed, because of the removal of the ovary, that the woman's health is guaranteed in the future, that she shall never have any other disease, but that woman can get any other disease like anybody else. Once in a while they may pick out a case, here and there, where a woman has become insane from something else—the ovaries amount to nothing in that connection. What do the ovaries amount to when, after a certain period in a woman's life, they shrivel up? Where is that ovary then and the uterus? A mere little speck. Do these women become insane? Don't they enjoy life after the organs of reproduction are all destroyed except the vagina?

I admit we have got to draw the line regarding the cases to be operated upon. We are inclined to be enthusiastic, and one is the extreme that wants to operate, and the other is the extreme that doesn't want to operate. Simply because Dr. Leonard admits that he can't operate, he doesn't want any operations performed. I get real tired when a man comes along here who doesn't know how to operate, who can't operate, who isn't fit to operate, who has not the nerve or spunk to do it, and have him come up here and say these operations are not advisable. But a man that has the spunk and pluck, and who has operated for the length of time he says Dr. Keith has, who finally looks back and says in his conscience these things should not be done, does not have his conscience trouble him with the surgery of today. His conscience troubles him with the surgery of the past. He thinks he couldn't help it; he was not an aseptic surgeon at the time; he did all the business he could. But today we are practicing aseptic surgery with our various precautions, and it is an entirely different thing. I will admit that there are men who finally become old, who in the race of life are being run away with by younger men who are getting all their business; and that by and by they do not get any more business, and they get sour and they think these things ought not to be done. You can quote all kinds of cases, all kinds of men, all kinds of experiences; but you want to learn this other side of the case still. There are some surgeons, like the one quoted from Cleveland, who have poor statistics. He may be a brilliant operator. I know of brilliant surgeons, of brilliant operators; but I wouldn't have them operate on me. I know they are dirty, I know they have never grasped the principles of aseptic surgery, and never can, and their results are bad.

Everybody loses a case once in a while. A man who is not an aseptic surgeon, who is not imbued with it, who has not got microbes on the brain—we see them everywhere—that man would not have very good success; and if that man comes along and gives me statistics I would take no stock in them whatever. I want to know the details of his work. I want to know how he operates and works before I will take any stock in his statistics.

So the point and the sum and substance of my impressions are as I have stated. Two of my deaths were from sarcoma, and one was probably from sepsis. In a case of sarcoma it is very doubtful whether we should operate. Another thing that I desire to speak of is, that we should have more courage when we have once opened an abdomen and find it inadvisable to go further, and shut it up again.

The point in my paper was simply this: that in these cases, whatever the disease of the pelvic organs may be, when every other means of treatment has been tried in these cases, as a last resort laparotomy should be performed; and that no healthy ovaries ought to be removed, either for symptoms of a reflex nature or anything similar.

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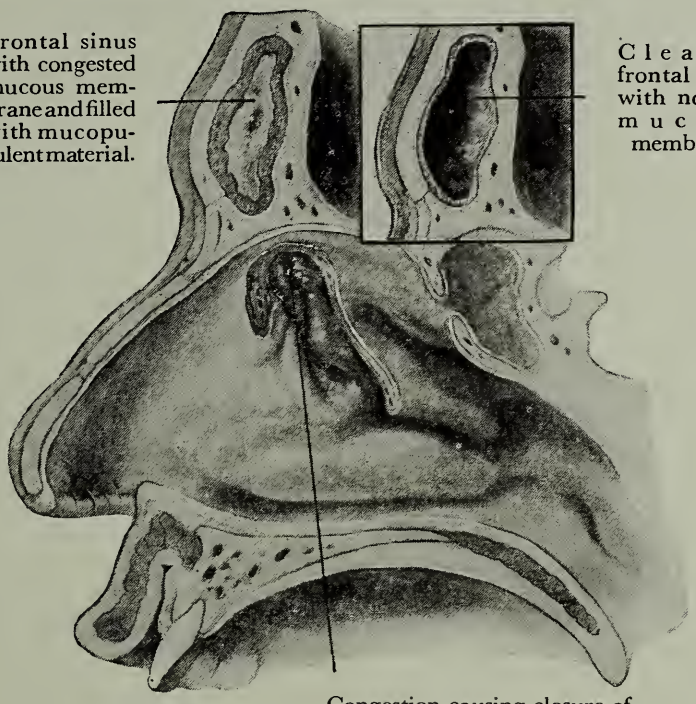
**COUNCIL AND COMMITTEE MEETINGS**

1. Tuesday, September 16—Ethics Committee—Grand Rapids—12:30 p.m.
2. Tuesday, September 16—Publication Committee—Grand Rapids—6 p.m.
3. Wednesday, September 17—Industrial Health Committee—Grand Rapids—6 p.m.
4. Thursday, September 18—Cancer Committee—Grand Rapids—12:45 p.m.
5. Thursday, September 18—Second Session of The Council—Grand Rapids—12:30 p.m.
6. Thursday, September 25—Child Welfare Committee—Jackson—5 p.m.
7. Wednesday, October 15—Executive Committee of The Council—Detroit—4 p.m.

# PATHOLOGY OF THE UPPER RESPIRATORY TRACT

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## NEW CONDITIONS DEMAND NEW TECHNIQUES

By Morris Fishbein, M.D.*

When Mr. Pratt spoke to you about the accomplishment of the National Physicians' Committee, I know that he did not want you to believe offhand that this great campaign of *Life* magazine and all of these advertisements in the newspapers and all that has gone on in the gradually changing sentiment of the American mind regarding so-called socialized or state medicine is the immediate and direct result of the activities of this one organization. **He would not want you to believe that, and you as scientific men could not possibly believe that.**

**However, he did want to show you something that was scientific; that was that modern living and modern social trends demand new types of machinery to accomplish results.** Just as the coming of new types of microscope, of the electron microscope, new types of physical therapy, new types of chemotherapy, and other new discoveries in medicine make possible a tremendous advance in the campaign against disease, so also does the coming of new machinery for popular education make possible the dissemination of vast amounts of information in a way never previously possible. **And it would be very unfortunate indeed if modern medicine failed to realize that it must be scientific in its utilization of these new tools of publicity and information and education of the public.** Modern medicine would be just as backward if it failed to use those devices as if a physician should say to himself, "I will not use one of these new drugs that have been invented.

Medicine advances through the use of new techniques, and enlightenment of the public must also advance through new techniques.

Now, as our Government has advanced, the minds of people have been bewildered by a great many new terms which are a part of the jargon of modern economics. They have been confused by the jargon of modern propaganda and so-called education. All of the various appeals which are utilized in various ways to our population are recognized to be essentially propaganda. Simply, the power that resides in propaganda is now recognized by every government in the world. **Our own government has adopted techniques which make it extremely difficult for any organization which is primarily a scientific organization to avail itself to the fullest of new techniques nevertheless which are available** not only to commercial organizations and similar bodies but available now in greater measure to the Government itself than to any other single organization either for profit or without profit in our country.

That is the important point to realize. Our own government has created a great propaganda agency for the dissemination of information to the American people regarding the activities of our government.

Early in American history, in a period around 1776, our nation made a tremendous social gain. We established a country with constitutional government, which guaranteed to its citizens certain fundamental rights. One of these was the right of free speech. Another was the right of freedom of worship. And a third was the right to freedom of public assembly.

There are many countries in the world where an assemblage such as takes place here tonight would, of course, not be possible. **But having freedom of public assemblage, and having freedom of speech, you have in your hands two of the greatest forces that you could possibly get in order to make your will known to the people of the United States and in order to make effective the knowledge you possess.**

Would it not then be an extremely archaic and obsolete performance for a body of scientific men to fail to utilize, in order to make their thought and their will and their knowledge effective, the very technique which the science of dissemination of information to the public has brought to us today?

**Now, the best way—and I say this advisedly—in which American medicine can make its will and its belief and its opinion and its knowledge regarding these new trends widely known to the vast majority of the American people is through an organization such as this. . . .**

For that very reason I have personally, and without regard to any position which I may hold in the Headquarters Office of the American Medical Association, felt **that in the National Physicians' Committee the American medical profession possesses an organization potential to accomplish more for education of the American people regarding the fundamental standards inherent in the establishment of a high quality of medical service for the people of the United States, than it could possess in any other organization.**

There are some who have said, "Why should this independent organization, coming into the field, utilize the county societies of the American Medical Association or the state societies or any such similar bodies in its work?" **The answer, of course, again is the simple scientific answer; that here are groups of men who assemble regularly, the very groups that you want to reach, the most effective groups that you could possibly reach. And why should it be necessary then to assembly a wholly new type of machinery in order to carry out a laudable purpose?**

At the first so-called National Health Conference, Mr. Michael Davis arose and said, "American medicine travels on a bicycle and social medicine travels in an airplane." He rather sneered at the way in which American medicine travels on a bicycle. That analogy actually should be applied not to medical service but to the utilization of these new forms of public education to which I have already referred.

Again, I would say that at this particular moment many of the social gains which were agitated in the five years which have just passed are temporarily in abeyance.

**But I would point out to all of you that they are only in abeyance because, for the immediate present, other matters are demanding emergency attention and action.**

There exist in the United States many professions and groups which have for their objective the creation of **a new technique in medical practice which would put the layman rather than the physician in charge of setting standards and providing medical service. So long as these professions and groups continue to exist and to grow in numbers, just so long will there have to be continuously in the forefront for the protection of medical science, an organization such as this, which can carry on not only an effective defense but an effective warfare.**

*The text of an address by Morris Fishbein, M.D., delivered before one hundred seventy-six distinguished physicians from thirty-two states assembled for the first national conference of representatives of the National Physicians' Committee for the Extension of Medical Service—Cleveland Hotel, Cleveland, Ohio, June 5, 1941.

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# The Adjustment of Marital Problems*

By Lowell S. Selling, M.D., Ph.D., Dr.P.H., F.A.C.P.
Detroit, Michigan

Lowell S. Selling, M.D.

*A.B., University of Michigan, 1922; A.M., in psychology, Columbia University, 1925; Sc.M., in physiology, New York University, 1925; M.D., University and Bellevue Hospital Medical College, 1928; Ph.D., Columbia University, 1930; M.S.P.H., University of Michigan, 1939;; Dr.P.H., University of Michigan, 1940. Director, Psychopathic Clinic, Recorder's Court; Adjunct Attending Neuropsychiatrist, Harper Hospital; Associate Attending Neuropsychiatrist, Eloise Hospital. Fellow, American College of Physicians, American Psychiatric Association, American Association for the Advancement of Science, American Association of Applied Psychology, American Association on Mental Deficiency, American Orthopsychiatric Association, American Public Health Association, British Psychological Society, Royal Medico-Psychological Society, Asociasion Medica Argentina—Sociedad de Medicina Legal y Toxicologia, Sociedade de Medicina Legal e Criminologia de Sao Paulo. Member, Advisory Board of the Journal of Criminal Law and Criminology, Advisory Board of the Journal of Criminal Psychopathology, Michigan State Medical Society.*

One of the most deeply entrenched traditions of medicine is that of "the family doctor." This man has been free to move from one social stratum to another. He was welcome in all homes as a guest; few had any hesitancy about asking his advice when there was a need, even though there might have been no money to pay his fee.

**The tradition of the family doctor, who drove his horse through snow banks and blizzards, rested not only on his ability to alleviate pain and suffering and his ability to restore to health the wage earner and the housewife, but also equally as much on his ability to serve as a family counselor.**

His knowledge of law might not have been as extensive as that of local attorneys, but his knowledge of human nature frequently helped people to avoid the courts of law. Sometimes he could effect a settlement between two individuals who were both patients; at other times he could suggest that the Judge or the Prosecutor be lenient in a deserving case. He rarely counseled divorce, for from his point of view he felt that it was unnecessary; that people could be kept together even though they might have their trials and tribulations. Occasionally the husband might be a drunkard who abused his wife; and in cases where there were children to consider, the family doctor would expend as much effort to aid the family in its social adjustment, as he would to set a broken leg or to cure a case of pneumonia.

Family relations institutes are being set up in various parts of the country by private agencies, of which the one in Los Angeles headed by Dr. Popenoe† is a classic example. Courts in Philadelphia, New York, and Chicago, as well as Detroit, have clinical facilities for aiding in the medical and psychiatric adjustment of these people. Our clinic has seen well over a thousand Domestic Relations cases, has aided in the adjustment of some, has referred others to private physicians or to public agencies for help. There are certain premises which must be set up in dealing with cases involving domestic relations situations. Some of these will be discussed in detail.

In the first place, it must be remembered that the married couple must be considered as two integrated but individual organisms. Each one possesses a personality which is built up through the years, and which is distinctive from the other. Each personality started with the genesis of their respective family trees, as the ancestors con-

*Presented at the Noon Day Study Club, at the Wayne County Medical Society Clubrooms, January 14, 1940.
From the Psychopathic Clinic of the Recorder's Court, Detroit, Michigan. Series NP, No. 6.

†cf. Popenoe, P., *Modern Marriage*, New York, The Macmillan Company, 1940, p. 299.

tributed to each one of the couple by giving to him or to her points of strength or weakness which the early environment, adolescence, maturity, and marital life had modified.

There is no known group of individuals who, as a group, are not marriageable. For example, there is no non-marriageable race, or obviously no non-marriageable limitations on size, for midgets can marry and make a successful adjustment and so can giants within their own groups. The color of hair and eyes, and other factors in the physique (in themselves inherently), mean nothing in causing or solving the problem of marriage.

In dealing with marriage, which we recognize as a socio-medical problem, the old-fashioned doctor possessed fewer scientific aids than he did in his strictly medical practice, which a few generations ago had none too many resources at hand. The study of psychiatry was still in its infancy, especially the type or division of psychiatry not primarily concerned with the diagnosis and treatment of psychoses, but which was designed to give assistance to people in the art of getting along with one another. In spite of his lack of formal precept, he achieved great success because his common sense guided him, and his affection for his patients was limitless.

Today perhaps we have less actual attachment for the patient but more science in our armamentarium. Every physician sees cases involving domestic conflict in his office, perhaps daily, depending on his clientele. Sometimes the case comes to him because there is nowhere else to turn. Some physicians are faced with domestic adjustment problems because of the nature of their specialties. This is particularly true of the men in the genito-urinary, gynecological, and obstetrical fields, as well as in the fields of the pediatrician and the psychiatrist. I have mentioned these specialties in particular, but the general practitioner would likewise examine and treat as many cases as the specialist if he were in a neighborhood where his patients were accustomed to come to him with troubles beyond mere aches and pains. The orthopedist sees cases of laborers or others who need bone and joint correction, in order that they may continue to support their families.

Domestic adjustment offers a problem which is as deeply integrated with medicine as the problem of bacterial infection. Much research has been done in this field. Nevertheless, between two individuals, body build, color, education, physical condition, religion, when endowed with special significance by one of the partners, can become primarily responsible for marital conflict.

A number of studies have been made, primarily by sociologists, to show that individuals who come from different racial origin, such as the mulatto, the Chinese-white cross, Indian-Negro-even Indian-white cross, have less chance in a successful marriage than when both are of the same genesis or when the racial intermarriage is acceptable to both races, so that the best elements of both races are brought together, such as Hawaiian and Chinese cross. The Irish and German combination in this country seems to be less successful than even Irish-Irish, Scotch-Irish, even Irish-English—I say "even" because of the fact that there are cultural problems of a "traditional nature" that arise from this last combination.

The treatment of domestic relations problems lies in three spheres. The first sphere is the premarital treatment. In other words, the prevention of marital discord by advice and correction of defects before marriage. This lies in the field of sex education, education for marriage, as well as medical care. The universities, the Y.M.C.A.'s, and churches are doing a great deal along the first two lines. I feel that this type of work when carried on by laymen must not be encouraged to too great an extent, but there is no reason why, in certain spheres of marriage, such as the economic and purely biological, theoretical advice by properly trained people cannot be given. However, it is not the place of this paper to discuss this sphere. Premarital advice is deserving of extensive treatment and, as a matter of fact, all books on marital adjustment contain discussions of these matters.

The other two phases, postmarital and pathological, are of greater importance. The prevention of marital conflict after marriage is concerned with correction of the emotional adjustment or physical ailments which may occur after marriage by means of competent advice and help in understanding each other, particularly by the family physician. The third, and the largest, sphere of domestic relations adjustment lies in the correction of pathology. This pathology may be due to false fantasy life or infantile concepts of marriage because each partner was not being truly himself during the courtship, or even actual neuroses, and may reveal itself in fights,

in endless arguments or disagreements between the members of the marriage.

### General Causes of Domestic Difficulty

*Physical Disability.*—By physical I mean not only sicknesses and ailments of a general systemic nature which preclude the husband working or the wife taking care of the house, but also those disorders of the sexual function which prevent sex satisfaction in marriage.

Some individuals believe that there is a tendency on the part of psychiatrists to over-emphasize the significance of sexual maladjustment, but it is certainly true that persons who are maladjusted sexually are more apt to be irritable, and in other ways to present special problems because they are unable to hide their real feelings. A husband says his wife will not receive him sufficiently, frequently, or with sufficient show of enjoyment so he in turn rejects his wife and frequently stays away from home. This behavior consequently gives rise to jealousy and suspicions of various kinds.

From a treatment standpoint it is possible for the mildly sexually maladjusted individual to be taught by his physician to make an adjustment. If there is a vaginal malformation or hyperspadias, operative proceedings are possible, but dyspareunia (a condition which frequently brings the maladjusted couple to the physician) is more often on a psychogenic than a somatogenic basis.

The treatment for the physical discord lies specifically in the hands of the physician. If the husband is sickly he can be treated through regular medical means. The wife can be brought to an understanding of his condition and if the treatment is successful it will make the husband a more adequate man both economically and physically.

If the wife suffers from an ailment, the family, particularly one which is economically secure, can, by proper arrangement of domestic service, learn to compensate for her incompetence until such time as she can recover enough to take over her household duties.

Only too often the physician forgets that when there is a physical incapacity of either of the partners in a marriage, there are duties and obligations which must be taken over by the other, and while the doctor may be treating the man his wife will need encouragement, sympathy, and perhaps an understanding explanation so that she can bear her burden better, and, of course, the reverse is the case if the wife is ill.

*Emotional Integration.*—The second type of marital dysfunction that needs aid from the physician in adjustment is that which frankly may be called emotional integration. When two strange people find it necessary to live together constantly for a matter of eight or nine hours a day, the similarity of tastes and the identity of interest is bound to find, on the one hand, rough spots, and on the other, sensitive areas upon which the rough spots rub. These can be adjusted by each partner carefully working on these problems and each trying to do things which each knows will add to the happiness of the partner. No two people can be expected to be entirely congenial. Even those who as children have lived next to each other, and have been brought up in the same school, whose parents have moved with the same group, who are members of the same religious faith, these come before the clinician with marital maladjustment requiring some aid.

Often, the physician can encourage each of the individuals to tell him what particular small features in the marriage are most annoying. These can then be tactfully conveyed to the other partner. Among the complaints that newly married men have of their wives' conduct are very small things: such as leaving the cap off the toothpaste, leaving the tools out of the tool chest, straightening out the desk so that "I can't find a thing that I want to lay my hands on when I want it."

Cooking and eating habits of the two partners may lead to conflict. When the husband or the wife has been brought up in restaurants, for example, he or she is apt to like over-cooked meat, canned peas, mashed potatoes. The idea of the highly diversified type of menu to which the person who has been brought up in a wealthy home would be habituated is to the restaurant-raised almost repugnant. Many persons after marriage discover that they have food fads and eating habits which have not been corrected by their parents. They find, in addition, that the mate has other food fads and eating habits and the nutritional problem becomes a severe one not only from a standpoint of nourishment and a balanced diet but also from the standpoint of

enjoying the food. For instance, the husband may like lettuce and cabbage, and the wife may not. The husband may reject starches with the probable exception of pies—most men like them —while the wife may prefer pastries to pie, and would prefer macaroni, potatoes, rice and other inexpensive staples. The typical case of domestic maladjustment of this type is, of course, the well-known Jack Spratt family. The physician who has acquainted himself with diets, preparation of food, its purchase and service (of great importance in specialties dealing with metabolism or gastro-enterology) should be able to give the wife advice for gradually weaning her husband over to adjust to the mate's food habits.

*Economic Maladjustment.*—A number of cases where husband and wife conflict over the distribution of the joint wealth and over the husband's incapacity to supply the demands of the wife are numerous, and yet I do not believe that their number is as great as the uninitiated suppose. Such conflicts are the most remediable, and yet, for the physician, present the most difficulty, because only too many physicians are not able to handle their own budgets. Problems arise when spending of money for hobbies, books, or special leisure activity is curtailed suddenly. Prior to marriage, plans of specific interest to the individual are frequently made; now all leisure activity must be planned to keep the partner in mind, so that he may share equally or be included in other activities.

There is, in this country, a rapidly increasing body of experts who deal with the handling of the domestic budget. It is surprising to note in newspaper columns, such as those of Nancy Brown or Ruth Alden, how scientifically the income in a household can be rearranged. While the psychiatric advice, which is given only too often by these newspaper writers, is not usually very good—more and more we notice newspapers advising individuals to consult a psychiatrist for solution of their problems. The difficulty of the adviser is to reconcile the desires, ambitions and wishes of either one or both members of the marriage with the actuality of a fixed income or an income which, particularly among the laboring class, is not too stable. It is not the place here to offer arguments for an annual wage, but I am sure that a very large proportion of our domestic relations cases occurring among working people and arising from economic maladjustment could be obviated if some sort of a consistent budget could be planned. However, reasonable goals must be set. The man who is making $1800 a year cannot expect to build a house in Palmer Woods nor should the business leader restrict his wife to cotton-print dresses.

*Child Guidance.*—The fourth group of domestic maladjustments are those which apparently lie in the field of rearing the offspring, and have roots deeply imbedded in the unconscious and do not stem from the obvious surface conflicts. The field of child guidance is an immense one and one of many ramifications. There is insufficient space here to cover all the exigencies that arise, yet, one or two examples will suffice to show how a child may be brought to the pediatrician or to the general practitioner when the actual cause of the symptoms lies not in the child or his mentality but in the attitude of the parents toward one another or toward the child.

Take for example the annoying habit of bed wetting. It is not infrequently the case that when a child is wetting his bed that he is doing it to attract the attention of the mother. The child finds that being a bedwetter he gets a scolding every morning or he might even be awakened in the night to get a scolding. Whether he is getting pleasure or pain from this relationship is not the crucial point but the point is that he is getting attention which he craves.

The question immediately arises as to why he demands this attention. Sometimes it is because the sex adjustment between the parents is inadequate—the mother rejects the father, and because the boy looks a bit like his father, or merely because he is a boy, there is a tendency to reject him. He runs to her with a little piece of paper and wants "mummy" to look at it, she pays no attention and goes along about her business. She may, if financial circumstances permit it, go to card parties in order not to have to take care of the child for an afternoon.

The therapy here primarily lies not with the child, but in aiding the sexual adjustment of the parents. A knowledge of the causes of sex maladjustment is pointed out under the first cause for marital friction. Deep understanding on the part of the physician can be gained only from experience, but he must look for something

more than a palliative means of removing immediate symptoms such as the bedwetting.

Further, as was pointed out by Dr. Gilbert Rich at the last Central Neuropsychiatric Association meeting, if one can devise an apparatus to wake the child up before he wets the bed, this will remove the source of friction and the mother will tend less to reject the child, and in diminishing the rejection of the child may become emotionally more secure and more adjusted to the husband. One can generalize then by saying that the problem child is the child of problem parents and the physician should work on both problems to remedy either.

Another type of marital maladjustment which arises during child rearing occurs when the child shows symptoms of being overprotected or "spoiled." The mother who has lost another child, or who herself had an unhappy childhood, tends to devote too much attention to the child, particularly if it is the only one. The father, coming home and finding the youngster disobedient, quarrelsome and noisy (and having no understanding of the causes of these symptoms) rejects his wife and considers her incompetent. She needs emotional adjustment under these circumstances in the adjustment of her own attitude toward the child so that when this is resolved her attitude toward the husband improves and with an improvement in the child's behavior his attitude toward both is helped. In this particular sphere a lesson to every physician dealing with children can be brought out, for the physician should treat not only the physical ailment of the child but the attitude of the parents while the child is sick. The doctor must not permit too much over-indulgence to compensate for the child's pains. Since it is a tragic occasion when a loved child or husband or wife is lost, the physician cannot shake his head, offer a few words of sympathy, and walk out the door. He must turn his attention to the understanding of the needs of the bereaved one, and suggest, if possible, some other outlet, some other interest, by means of which it might be possible to distract the patient or to prevent a later emotional conflict arising from this bereavement.

*Neurotic Mechanisms.*—The fifth type of cause of marital dissatisfaction is a deep-seated one. It is one which almost inevitably calls for the aid of the psychiatrist. Merely because it calls for this aid does not preclude intelligent preliminary treatment on the part of the general physician. This group comprises cases of misidentification, or neurotic mechanisms arising from the setting-up in childhood of serious complex material. An example of a case such as this is the patient who is tied to his mother's apron strings and who develops what, in brief, is called Oedipus Complex, an emotional over-attachment to the mother with incestuous ideas, and hatred for the father. The patient grows up and finds that to his mind no woman is really good enough for him for he is latently homosexual. Yet because of aggressiveness of the woman who is to be his wife in the future or because society seems to demand it of him, he marries. When difficulty develops neither the patient nor his wife can put their finger on the trouble for the complexes are deeply hidden. Perhaps the only symptoms that the man is aware of as he grows up is the fact that has a tendency to worry, or he has a tendency to brood, or perhaps a preference to remain by himself and to be not companionable. Such a patient, when he faces the demands of the marital state, is inadequate, or perhaps he finds himself to be sexually incompetent, or perhaps he is only irritated by the fact that he must feed an extra woman who does not represent his mother, or in some cases who symbolized his mother to such an extent that he has actual feelings of guilt when lying next to her.

The foregoing is only one illustration of the "infantile conflict" type of case and will serve to reveal the problems and their significance in marriage for this vast group of complex-ridden individuals who are neither insane nor diagnosably neurotic. The private physician must learn to recognize that the patient is not necessarily telling him causative facts when he speaks of the things which he dislikes about his wife. A deep attachment to the mother should offer to the physician proof that there is some deep-seated conflict that needs to be taken care of.

*External Circumstances.*—The last group of domestic maladjusted cases are those which are maladjusted because of external circumstances, such as the interfering mother-in-law; religious conflict in which the priest, minister or rabbi comes to set up in the minds of one or the other of the partners the idea that he or she should not be married outside his faith, conflicts because

of educational differences or differences in interest—where the wife wants to go out and dance night after night because she is still a youngster and feels that dancing is part of her youth, although she married an older man for the security that he can give her—or where the background and experiences of the two partners are widely different. These latter are more familiar to the lay person. One cannot enumerate all of the possibilities in this sphere, even these are available to treatment by the physician. For example, the physician can recommend that the family get away from the offending "in-law." He can discuss in a rational manner, with a woman who has sufficient intelligence, the fact that she is getting other satisfactions which can be substituted for the recreations which she still thinks she needs. The inadequate mate who does not like symphonies, reading, or intellectual recreation, can often be brought by means of night school or clubs to a level of understanding where an adjustment is possible. But before ascribing the domestic situation to these external causes one should be careful to eliminate all the deeper emotional, economic and the conflictual possibilities.

I want to cite briefly one case which has come to the clinic. "Barbara" is a twenty-two year old white girl who is Canadian born. She was married to a man several years older than herself and she claimed that the husband was assaultive. He emphasized her irritability. While her husband drank, he did not drink to a great extent. He wished companionship which he was not getting from his morose wife. Careful investigation showed that there was nothing in the emotional adjustment, in the economic adjustment, or in the physical adjustment. The sexual relations were satisfactory. However, the wife happened to be a Canadian-born person and the legitimacy of her immigration was in question; there was danger of her being deported to Canada. This problem made her morose so that she was a pest around the house. The husband reacted in an unfortunate fashion to this moroseness, and not knowing the cause he began to stay out. As her maladjustment got worse she believed that he was being unfaithful. By the time that we saw both of these people there seemed to be little hope for the marriage. However, her immigration problem was settled with the authorities; it was found that she was not in any danger of being deported, and it was only a few months before the family friction cleared up.

To summarize, it can be said that the problem of adjusting domestic relations cases is a complex one. The greatest prevention can be done either in the early days of marriage or premaritally.

However, maladjustments of various types can be treated even after they have gone along for considerable time if the causative factors can be analyzed and worked out, and if both partners will be frank and coöperative. The physician must be sympathetic, and must be willing to look into causes beyond those which would give rise to merely physical symptoms. He must be willing to observe the fields of activity for conflicts on the basis of education, religion, recreation, as well as other fields; he must be aware that unfortunate friends or relatives can set up a conflict and he must know that deep-seated conflicts arise during childhood because of basic infantile neuroses. This last type, of course, is a very frequently found kind of marital adjustment case and I would emphasize that only preliminary work should be done by the physician for the actual cure should be worked out with the psychiatrist.

All in all, each case must be handled as an individual. There is no reason why, by means of a solution of a marital problem, the physician cannot tie to himself a grateful family, in the same way that the old-time practitioner used to do.

MSMS

**CLINIC**

Your name? Your age? Where do you live?
Your height? Your weight? Yes, you must give
Your mother's name. Your father's name.
Your brother's name. Your work? Your wage?
Your boss? Your shop? Here put an X
Right at the top. It means you're poor.
That's all; sit down. And wait, you're poor.
Doctor? No. Sit down, no hurry.
Come? He'll come sometime, don't worry.
Time? It's eight. Time? It's nine.
Time? It's ten. Time? It's time.
Your name? Your age? Hurt much? Hurt here?
Say ahhh, relax. Lean back, draw near,
Say ahhh, breathe out— And out—and in—
Go home? No, wait. The nurse must have
Some facts. Please state your middle name.
Your mother's name. Your father's name.
Your brother's name .....

By Sala Weltman, age 12, the first prize poem in the annual high school poetry contest in New York City.—From *Westchester Medical Bulletin* and *Connecticut State Medical Journal.*

# Uterine Fibroids Complicating Pregnancy*

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The management of pregnancy complicated by fibroids of the uterus generally entails greater responsibility for the obstetrician than does the management of the normal patient, especially when it may be the last or only opportunity for the individual to have a baby. Since the incidence of complications during pregnancy, labor and the puerperium is higher in these patients than in a similar group of normal patients there is a natural tendency to attribute any abnormality which may arise to the fibroid. This assumed relationship has occasionally led to hasty and even needless interference. Accumulated data and experience have proved that pregnancy complicated by fibroids should be managed conservatively unless interference is clearly indicated.

As pointed out by Lynch[5] there are, in general, four methods of caring for these patients during pregnancy:

*Hysterectomy during early pregnancy.* This radical procedure is necessary in only a small percentage of cases and should not be done without first considering other acceptable methods of treatment. In most instances the patient should be allowed to carry the pregnancy to term, at which time abdominal delivery and hysterectomy may be performed if necessary. In a few cases of early pregnancy associated with multinodular tumors the operation may be both justifiable and necessary.

*Therapeutic abortion.* Interruption of pregnancy certainly does not solve the problem. Because of the distorted uterine cavity the abortion may be difficult and furthermore it does nothing to prevent the recurrence of the same complication with another pregnancy. If the tumors are large enough to prevent the pregnancy from being carried to term immediate hysterectomy is probably indicated.

*Myomectomy.* The removal of tumors from the pregnant uterus is no longer granted widespread acceptance. Myomectomy may be successful when there exists a single small tumor, but with multiple nodules it is likely to result in interruption of the pregnancy. The increased vascularity of the hypertrophic uterine musculature makes perfect closure of the tumor bed difficult and bleeding from the operative site is not uncommon.

Mussey and Hardwick[6] resorted to myomectomy thirty-two times with twelve abortions, three premature deliveries and one maternal death. All of Eisaman's[2] three operations for the removal of tumors were followed by abortion. Troell[12] reported 157 myomectomies during pregnancy with a fetal mortality of 23.9 per cent and a maternal mortality of 3.9 per cent.

*Carry the patient to term.* While a program of non-interference is not always desirable it seems to be the most satisfactory method of treatment for the majority of cases.

## Occurrence

In the last 5,271 consecutive deliveries at the University of Michigan Maternity Hospital fifty-three were complicated by the presence of uterine fibroids, an incidence of 1 per cent. The incidence in this series compares with those reported by Watson[13] (1 per cent), Emge[3] (1.3 per cent) and Pierson[7] (0.8 per cent), but is somewhat higher than Campbell's[1] (0.43 per cent) and Pinard's[8] (0.6 per cent).

*Age and Parity.* The average age of this group of patients was 34.5 years; the youngest was 19 and the oldest 47. The greatest incidence was between ages 30 and 39 and the lowest among patients under 20 years of age. Twenty-one were primipara and 32 multipara. The parity distribution is shown in Table I.

TABLE I.—DISTRIBUTION OF PARITY

| | | |
|---|---|---|
| Para | 0 | 21 |
| | I | 9 |
| | II | 7 |
| | III | 6 |
| | IV | 4 |
| | V | 2 |
| | VI | 3 |
| | X | 1 |

## Effect on Pregnancy

Of our fifty-three pregnancies complicated by uterine fibroids, eight, or 15 per cent, had tumors

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large enough to require hysterectomy in the early months of pregnancy. The largest of these extended to the right costal margin at fourteen weeks and the smallest reached the level of the umbilicus at the twelfth week of pregnancy. The average age of this group of patients was 39 years. Four of the patients were primipara and four multipara.

There was considerable variation in the size of the tumors in the remaining forty-five patients but all were palpable on the first examination and large enough so that it was the opinion of the examiner that they might interfere with the pregnancy.

Four, or 8.8 per cent, of the forty-five patients aborted between two and one-half and six and one-half months. Three of these had cramps and irregular intervals of bleeding throughout the entire duration of their pregnancies. In the fourth patient termination followed an attempt at replacement of a retroverted incarcerated uterus. The incidence of abortion is somewhat lower than is reported by others. Eisaman[2] reported abortion is 12.6 per cent and Campbell in 14.7 per cent. Watson[13] estimates that 15 per cent to 24 per cent of pregnancies complicated by fibroids terminate in abortion and Studdiford[11] states that premature termination is three times more frequent than in normal individuals.

The other common complications occurring during pregnancy may be attributed to impairment of the blood supply to the enlarging tumors, which is thought to result in degenerative change.

According to Emge[3] there is both an actual and a relative increase in the size of the tumors during pregnancy. The actual enlargement is in a ratio equal to the uterine development and is due to hypertrophy of the tumor elements, edema and an increase in the blood supply. As the uterus enlarges to accommodate the growing fetus the wall becomes thinner and the fibroid nodules become more prominent; this factor plus the true enlargement of the tumors gives an impression of more rapid growth than actually occurs. Tumors low in the posterior wall of the uterus may grow to considerable size leading to their incarceration in the pelvis and, in some instances, to compression of the pelvic soft tissues.

**Red degeneration, which usually occurs during the second trimester of pregnancy, presents a fairly typical symptom complex. The usual clinical picture is that of a sudden onset of pain localized over a fibroid, with a temperature elevation of one or two degrees and a moderate leukocytosis. The tumor is tender to palpation and a definite increase in size may be noted. As the pregnancy advances the fibroids outgrow their blood supply and become relatively avascular; vascularity may be further compromised by torsion of the tumor in its bed due to the intermittent uterine contractions during pregnancy. Infiltration of blood occurs throughout the embarrassed tumor, the resulting hemolysis stains the tissue the typical color associated with red degeneration, which has been compared to that of raw beef. The affected tumor becomes soft and enlarged and, when sectioned, bulges out of its capsule. There occurs tissue necrosis with loss of cell outline, the microscopic picture of infarction, but, as pointed out by Polak, there is usually enough normal tissue at the periphery so the tumor may recover.**

The incidence of degenerative changes in fibroids during pregnancy is relatively high. Campbell[11] found necrosis to be present ten times more frequently in fibroids from pregnant than from nonpregnant uteri. He performed four myomectomies during pregnancy, three of them to remove degenerated tumors. Of Mussey and Hardwick's[6] thirty-two myomectomies twenty-one were done for necrosis. Reis and Sinykin[10] removed twenty-three tumors in eighteen operations performed during pregnancy and eighteen of the tumors were reported as showing degenerative change.

As a rule the acute symptoms of degeneration last only from ten to fourteen days and in the vast majority of instances the patient can be carried through this period without excessive risk. With the exception of the eight patients operated upon early in pregnancy none of our patients was subjected to surgery during the antepartum period, although 12.5 per cent developed what we believed to be degenerative tumor changes. All complained of severe uterine pain and on palpation there was marked tenderness in the tumors associated with a definite enlargement. Treatment consisted of bed rest and sedation and in all our cases the symptoms disappeared in from one to three weeks. All the patients in this group were delivered of normal living infants.

### Effect on Labor

Obviously in these cases the responsibility of the attending physician increases with the onset of labor. While the incidence of operative intervention naturally rises, such interference should be only on the basis of clear-cut indications. Eisaman[2] reported operative delivery due to the presence of fibroids in 36 per cent, Mussey and Hardwick[6] 39 per cent and Campbell[1] 29 per cent. Our total operative incidence in this series was thirty-four per cent. Included in these operative procedures were five cases in which low forceps were used to complete the delivery in primiparæ, but were not done because of interference by the fibroids. When these are subtracted from the total the operative deliveries made necessary by the presence of fibroids in our series is reduced to twenty-two per cent (Table II).

TABLE II.—COMPARATIVE OPERATIVE INCIDENCE DUE TO FIBROIDS

| | Percentage | No. Cases |
|---|---|---|
| Campbell (1933) | 29.2 | 82 |
| Eisaman (1934) | 36 | 71 |
| Mussey Hardwick (1935) | 39 | 97 |
| Willson (1940) | 22 | 53 |

The operative deliveries made necessary by interference from the fibroids consisted of: (1) two Porro cesarean sections, one in a patient with uterine inertia associated with the tumors and the other because of a large fibroid mass low in the pelvis; (2) two versions with extraction, the indications being inertia and premature separation of the placenta; (3) one breech extraction; (4) one Duhrssen's incision and high forceps after an 86-hour labor; (5) one manual dilatation of the cervix and mid-forceps extraction after a 36-hour labor; (6) one mid-forceps extraction, and (7) one manual rotation of the fetus from a posterior position (Table III).

TABLE III.—OPERATIONS FOR DELIVERY

| | |
|---|---|
| Porro section | 2 |
| Duhrssen's incisions | 1 |
| High forceps extraction | |
| Manual dilatation cervix | 1 |
| Mid forceps extraction | |
| Forceps rotation POP to OA | 1 |
| Version and extraction | 2 |
| Mid forceps extraction | 1 |
| Breech extraction | 1 |
| Manual rotation ORP to OA | 1 |
| Low forceps extraction | 5 |

The increased operative incidence in patients with uterine fibroids may be attributed to: (1) *Inertia.* A uterus studded with tumors is unable to work as efficiently as a normal uterus in which there is nothing to interfere with the action of the muscle fibers. In some instances the body of the uterus may be made up almost completely of fibroids at the expense of muscle. In this type a true primary inertia may be encountered. The characteristics of the contractions in our patients are summarized in Table IV.

TABLE IV.—CHARACTER OF CONTRACTIONS

| Normal | Weak | Irregular | Weak and Irregular |
|---|---|---|---|
| 48.8% | 23% | 12.9% | 15.4% |

In most cases the pains were of good quality if there were only a small number of tumors, but in those patients whose uteri contained many nodules the contractions were poor. Most of the patients whose pains were classified as normal or weak had a normal duration of labor, but those in the last two groups (irregular, and weak and irregular) were more apt to have long labors. Despite the fact that the evaluation was made only by observation of the patient, the type of labor corresponded closely in almost every instance to the type of contractions recorded. (2) *Abnormal Presentation.* There is usually a higher percentage of abnormal positions in these patients. Campbell reported sixty-two per cent cephalic, 2.4 per cent face, 12.2 per cent breech, and 4.8 per cent transverse. In our patients there was less deviation from the normal (Table V).

TABLE V.—POSITION

| OLA | ORP | ORA | OLP | POP | MV | B | T |
|---|---|---|---|---|---|---|---|
| 36.8 | 21 | 13.1 | 2.6 | 5.3 | 2.6 | 5.3 | 2.6 |
| | | Cephalic | | | | | |
| | | 93% | | | | | |

Because of the increase in the number of abnormal positions and the high incidence of inefficient pains a prolongation of the labor may occur. Campbell reported 26 per cent with prolonged labor and 49 per cent with short labors in his cases. In our series 52.3 per cent of multipara had short labors, 43.4 per cent normal, and 4.3 per cent long (over sixteen hours). The longest multiparous labor was thirty-two hours. Of the primipara 33.3 per cent had short labors, 49 per cent normal, and 26.7 per cent long (over twenty-four hours), the longest being eighty-nine hours. The average durations of the stages of labor and the total duration for each group are

shown in Table VI and it is of interest to note that in this series both are well within the accepted normal limits.

TABLE VI.—AVERAGE DURATION OF LABOR

| | First Stage | Second Stage | Third Stage | Total Duration |
|---|---|---|---|---|
| Primipara | 20 h. 42 m. | 1 h. 30 m. | 14.4 m. | 22 h. 26 m. |
| Multipara | 7 h. 10 m. | 28 m. | 18.3 m. | 7 h. 56 m. |

Multiple small fibroids scattered throughout the uterine musculature may prevent firm contraction following the expulsion of the placenta and consequently postpartum hemorrhage must be guarded against.

The endometrium over large submucous fibroid nodules may be atrophic in character and unable to respond normally to the stimulus of pregnancy. If the placenta is attached in this area it may become partially adherent and manual removal may be necessary. Campbell[1] reported postpartum hemorrhage in 31.7 per cent of his eighty-two patients and adherent placenta in eight. In Watson's[13] series postpartum hemorrhage occurred three times and adherent placenta twice in 157 cases.

The estimated blood loss at the time of delivery in our series was under 500 c.c. in each instance and over 300 c.c. in only eight, or 20 per cent. Atonicity of the uterus following delivery of the placenta occurred twenty-four times, but in all instances the bleeding was readily controlled by the use of oxytoxic drugs. The placenta was adherent in two instances, necessitating removal in both cases. Low implantation of the placenta, as evidenced by rupture of the membrane at the border of the placenta, was noted six times; partial premature separation of the placenta four times and partial placenta previa twice.

### Effect on the Puerperium

The outstanding complication of the puerperium is stated to be degeneration of the tumor caused by the decreased blood supply as the uterus contracts and involutes. Because of the diminished circulation the indiscriminate use of oxytoxic drugs should be carefully weighed. If a uterine stimulant is indicated it would appear desirable that this be given in small and infrequent doses.

In Campbell's cases five myomectomies and three hysterectomies were done during the postpartum period for degenerated tumors. In six of our patients temperature elevation associated with marked tumor tenderness was noted during the postpartum period, but all six recovered without surgical intervention. The average number of febrile days postpartum was 1.7, the longest being for fourteen days.

The average number of postpartum hospital days for all patients was 15.8, the longest being twenty-nine days in a patient who had been delivered by Porro cesarean section. This is a much shorter period of hospitalization than was reported by Eisaman.[2] In his series those who delivered spontaneously remained in the hospital 14.5 days, those with abdominal operations nineteen days and those with vaginal operations 26.3 days.

Involution of the fibroid uterus is definitely delayed. It was the opinion of the various examiners who discharged our patients that in 83 per cent there was subinvolution of the uterus in addition to the palpated fibroid. This delay of normal involution may be due partly to interference with the normal mechanism of involution caused by the presence of tumors in the uterine wall.

### Mortality

The goal toward which every obstetrician strives is the reduction of both fetal and maternal mortality. Campbell reported a maternal mortality of 3.65 per cent in eighty-two cases of pregnancy complicated by fibroids, Mussey and Hardwick 2 per cent in ninety-seven cases, and Watson 3.2 per cent in 157 cases. In our series of fifty-three cases treated in a more conservative manner there were no maternal deaths.

Four babies delivered after the period of viability were lost. One died of aspiration pneumonia on the third day of life. The remaining three infants were stillborn, and in each instance the fetal heart was not heard when the patient reported to the hospital in labor. All three were found macerated at delivery. The longest of the four labors was twelve hours and all terminated spontaneously. The placenta in two of the cases was normal, but in the third several small infarcts were noted. The total fetal loss, including all the previable infants was sixteen, or 30 per cent. If the eight infants sacrificed by hysterectomy and the four abortions are subtracted from this, the fetal mortality for viable infants is reduced to 7.6 per cent.

## Summary

Although fibroids may be a formidable complication of pregnancy the majority offer no difficulty if they are managed properly. Interference with the tumors during the antepartum period is rarely indicated and before any operative procedure is attempted careful evaluation of the whole problem is essential. During pregnancy the removal of a growth which may obstruct labor is rarely desirable, but if the operation is performed the operator should be fully aware of the risk he is assuming. In a series of cases reported by Troell[12] the maternal mortality was 0.9 per cent higher with myomectomy than with hysterectomy during early pregnancy. Naturally the mortality is less with the removal of pedunculated subserous tumors than of those imbedded in the uterine wall, but subserous tumors, unless very large, prolapsed into the pelvis, or with pedicle twists, rarely cause trouble.

Although expectant treatment will result in a marked reduction of operative deliveries, the obstetrician must be prepared to interfere during labor should the indication arise. Patients with large tumors low in the uterus may require abdominal delivery at term. Many times, however, the tumor rises out of the pelvis as the lower uterine segment develops and the delivery will terminate spontaneously. If a cesarean section is necessary the problem of what to do with the fibroids must also be considered. Huber and Hesseltine,[4] presenting figures collected from the literature, found a maternal mortality of 15.4 per cent with cesarean section and myomectomy as compared with 3.4 per cent for cesarean section and hysterectomy. Of their own cases eight Porro operations were performed with no deaths while in two cesarean sections with myomectomy one death occurred. These figures emphasize the fact that the removal of tumors at the time of abdominal delivery is less safe than hysterectomy.

Although the tumors may undergo a degenerative change during the puerperium when their blood supply is suddenly reduced, our results with the conservative care of these cases suggest that the dangers of postpartum necrosis have been exaggerated. If operation becomes necessary the uterus should be removed in most instances. Huber and Hesseltine reported thirteen postpartum hysterectomies without mortality and ten myomectomies with one death.

**As the incidence of operative deliveries increases the fetal mortality rate rises. With the development of a more conservative attitude in the management of pregnancy complicated by uterine fibroids more infant as well as maternal lives are being conserved. This factor alone justifies a less radical type of care.**


## Conclusions

1. Fifty-three cases of pregnancy complicated by uterine fibroids are presented.

2. Although a small percentage of patients with fibroids will require hysterectomy early in pregnancy the majority can be carried to term satisfactorily. Therapeutic abortion and myomectomy are rarely indicated.

3. Symptoms of degeneration in the fibroids do not always indicate the necessity for interference. 12.5 per cent of the patients in this series showed such symptoms but all were carried to term without operation and all were delivered of normal children.

4. The presence of fibroids requires more frequent operative delivery, but every effort should be made to avoid radical interference. The incidence of operative deliveries due to fibroids in this series was 22 per cent.

5. Conservative management of pregnancies complicated by fibroids will lead to a decrease in maternal and fetal risk. In this series there were no maternal deaths and the fetal mortality for viable infants only was 7.6 per cent.

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# Varicose Veins

## Allergic Reactions in Injection Treatment*

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■ THE method of obliterating varices by the injection of sclerosing solutions has grown in popularity and repute for more than a decade. At first these solutions were very unsatisfactory because of local irritation, severe cramps, indolent sloughs, etc. However, other agents without these disadvantages were soon introduced; such solutions are sodium morrhuate, sodium ricinoleate, and sodium monoethanolamine (monolate). These materials are soaps of either natural or synthetic cod liver oil, castor oil, and olive oil respectively. For the obliteration of varicose veins these solutions are effective, generally painless, and harmless, unless too much is deposited extravascularly, even in which case slough is quite rare. Sodium morrhuate produces the least untoward local reaction and is the safest of these four solutions to use, especially in the hands of the less-experienced operator. Deaths from embolic phenomena are most rare. Proper selection of cases and post-injection care have either entirely eliminated or greatly reduced the complications and hazards. However, in this paper we are reporting the occasional natural or acquired allergy to these solutions which we have encountered.

### History

Allergy to sclerosing solutions has been reported extensively in the literature.[1-12] Ritchie,[9] as far back as 1933, classified the types of allergic reactions to sclerosing solutions as (a) erythematous, (b) gastrointestinal and (c) circulatory. Zimmerman,[12] in 1934, reported seven cases of sensitivity to sodium morrhuate. In his series three patients developed reactions following the initial injection. In the remaining four cases the allergy manifested itself only after the injections had been resumed following a rest period of several weeks or more. He advised intradermal skin-testing to determine sensitivity to preclude the danger of a severe anaphylactic response in the later type of case. In 1935, Praver and Becker[8] observed "untoward reactions in the form of a cutaneous eruption or a nitritoid crisis in seven out of 176 patients who received 783 injections of 5 per cent sodium morrhuate . . . for the . . . obliteration of varicose veins." Lewis,[6] in 1936, also reported a very severe reaction from sodium morrhuate in a patient who had completed a series of injections and had just returned to clear up a few recurrent varicoses. He reiterated that the greatest care should be exercised in "patients who had previously used the same solution if a sufficient time had elapsed to allow the development of a foreign protein sensitiveness." Dale,[1] in 1937, on the other hand, reported a severe nitritoid reaction following the thirteenth in a series of injections spaced at regular intervals. Moreover, Hatcher and Long,[2] mention a case in which reactions occurred only after the first injection of two separate series of treatments and none on successive injections. Traub and Swartz[11] and McCastor and McCastor,[7] in the same year, reported severe anaphylactoid reactions to sodium morrhuate. Levi,[5] in 1938, called attention to the fact that deaths have followed the use of the same substance. Shelley,[10] in 1939, described a fatality following the use of monoethanolamine oleate (monolate). He also suggested that death following the use of sodium morrhuate is not as uncommon as the medical literature would indicate. He mentioned the fact that one physician from the Medical Examiner's Office in New York City stated that he had seen three such deaths in the course of his duties, none of which have been mentioned in the medical literature. This experience has not been noted locally. Holland[3] and Kadin[4] have recently added to the reports of severe anaphylactoid reactions to that sclerosing agent.

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### Agents and Technique

Sodium morrhuate has been accepted as the solution of choice in this clinic and it has been used very extensively for the obliteration of varicosities. In a small number of cases, where an incompatability was found or experience indicated, sodium ricinoleate was used. Since 1930, using sodium morrhuate for the most part, we have treated 938 cases and have given 10,510 injections (Table I). The size of the usual dose varied from 0.5 c.c. of a 5 per cent solution up to 2.0 c.c. of a 10 per cent solution. The number of true reactions encountered were sixteen, giving an incidence of 1.706 per cent of the number of cases treated, and 0.152 per cent of the number of injections given.

TABLE I.

Annual Incidence of Allergic Reactions to Intravenous Sodium Morrhuate for the Obliteration of Varicose Veins

| Year | No. of Reactions | No. of Pts. Treated* | Incidence of Reactions to No. of Pts. Treated | Sodium Morrhuate Total No. of Injections | Incidence of Reactions to Total No. of Injections |
|---|---|---|---|---|---|
| 1930 | 0 | 25 | 0 | 450 | 0 |
| 1931 | 0 | 83 | 0 | 1,087 | 0 |
| 1932 | 0 | 134 | 0 | 1,327 | 0 |
| 1933 | 0 | 119 | 0 | 1,201 | 0 |
| 1934 | 0 | 125 | 0 | 1,114 | 0 |
| 1935 | 3 | 86 | 3.49% | 1,168 | 0.275% |
| 1936 | 3 | 82 | 3.66% | 1,030 | 0.291% |
| 1937 | 1 | 81 | 1.23% | 954 | 0.148% |
| 1938 | 2 | 96 | 2.08% | 1,052 | 0.190% |
| 1939 | 6 | 85 | 7.06% | 886 | 0.677% |
| 1940 | 1 | 22 | 4.54% | 241 | 0.415% |
| Total | 16 | 938 | 1.706% | 10,510 | 0.152% |

*New admissions.

In the selection of cases for injection of varicosities of the lower extremities, the usual safeguards in the history, and both local and general examinations were made. Special emphasis was placed on the integrity of the deep venous circulation. If there was no history of allergy, 0.5 c.c. of a 5 per cent sodium morrhuate solution was then injected intravenously into the lowest varix. On subsequent visits the amount was gradually increased up to 2.0 c.c., the increase depending upon the degree of thrombosis caused by the preceding injection. Treatments were generally given at weekly intervals. The patient was discharged when all the varicosities were obliterated. In a number of patients, where recurrences of some varicosities were present, treatment was resumed with the original 0.5 c.c. of 5 per cent sodium morrhuate solution.

### Reactions

Seven reactions followed the resumption of treatment, three occurring between the second and fourth injections. Two reactions followed the initial injection of sodium morrhuate; and one person first experienced allergic symptoms only after the twenty-third injection. In two instances, reactions occurred on the second and fourth injections of the first series respectively, and occurred in three cases on the second to fourth injection upon the resumption of treatment instituted to clear up a few recurrent varicosities. In the nine remaining cases the reactions followed only after a successive number of injections given at regularly-spaced intervals (Table II).

In most instances of sodium morrhuate sensitivity, an attempt to complete the obliteration of the varicose veins by sodium ricinoleate was

made. In two such cases, the patients also developed an allergy to the sodium ricinoleate on the second and fourth injection respectively (Table III). In the majority of the fourteen remaining cases that exhibited an allergy to sodium morrhuate, treatment with sodium ricinoleate was successful for the obliteration of the varicose veins. Skin tests for suspected allergy were of little or no assistance in preventing reactions. Only two persons, suffering clinical allergy to sodium morrhuate, gave positive skin reactions upon intradermal testing. The other individuals gave negative results. Only one person in this group had another form of allergy, ragweed hayfever. The allergy as with other allergies was specific, i. e., was not experienced when a shift from morrhuate to ricinoleate was made, even though two patients who were sensitive to sodium morrhuate later developed a sensitivity to sodium ricinoleate.

Our experience with allergic reactions (1.706 per cent of patients treated) compared favorably with the number encountered by Praver and Becker[8] who reported seven untoward reactions in 176 patients who had received 783 injections of 5 per cent sodium morrhuate (3.97 per cent of patients treated) (Table IV). In addition our incidence of reactions to the total number of injections was 0.152 per cent compared to 0.894 reported by the same authors.

TABLE II.

Time Relationship of Allergic Reaction to Number of Injections Received

| Serial No. of Injection | First Series of Injections | | | Résumé of Course of Treatment | | |
|---|---|---|---|---|---|---|
| | First Injection | 2nd—4th Injection | 5th Plus Injection | First Injection | 2nd—4th Injection | 5th Plus Injection |
| No. of Reactions | 2 | 2 | 5 | 0 | 3 | 4 |
| Incidence | 12.50% | 12.50% | 31.25% | 0 | 18.75% | 25.00% |

TABLE III.

Atopic Features of Allergic Responses to Sodium Morrhuate

| Criteria | Positive | Negative | Percentage Positive |
|---|---|---|---|
| Skin Tests (Intradermal) | 2 | 14 | 12.50% |
| Subsequent Allergy to Sodium Ricinoleate | 2 | 14 | 12.50% |
| Concomitant Allergy to Other Substances | 1 | 15 | 6.25% |

## Types of Reactions

The severity of allergic reactions ranged all the way from a localized urticaria at the site of the injection to coma and circulatory collapse. Allergic reactions to the sclerosing solutions could be classified as: (a) cutaneous, (b) respiratory, (c) cerebral, (d) gastro-intestinal and (e) severe anaphylaxis (Table V). A combination of the types was usually the rule. The cutaneous type of reaction was the most common of all the manifestations. It was manifested by either local or generalized pruritus, erythema and urticaria. It was also the easiest to control, responding to small injection of epinephrine, 1:1000, or ephedrine sulphate by mouth. Cutaneous reactions were noted in twelve persons. A case report illustrating this type of reaction was that of Case 15:

Mrs. E. G., aged twenty-one, came to the clinic complaining of bilateral varicosities of one year's duration. Due to the large size of the varicosities a saphenous ligation was advised. On June 1, 1939, 0.1 c.c. of a 5 per cent solution of sodium morrhuate was injected in a varix as a test dose for sensitivity. The next day the patient noted a mild pruritus at the site of the injection. This disappeared in a short while. On June 3, 1939, 2.5 c.c. of a 5 per cent solution of sodium morrhuate was injected into the distal segment of the left saphenous vein at the time of a saphenous-femoral ligation. Pruritus over the entire course of the injected vein was immediate. In five minutes giant urticarial wheals involving the entire left thigh and leg was noted. The patient was given 10 minims (0.6 c.c.) of epinephrine, 1:1000, intramuscularly and ephedrine sulphate, gr. ⅜, orally. The urticarial reaction gradually subsided. However, the pruritus remained for two days. Intradermal skin tests performed at a later date were strongly positive for sodium morrhuate.

The respiratory type of reaction was generally manifested by asthmatic wheezing and coughing. In our group of cases it always accompanied anaphylactic shock. Five persons suffered from respiratory symptoms. Case 2 illustrates this type of reaction:

Mrs. J. G., aged forty-five, gave a history of extensive varicose veins of both legs for fourteen years. The varicosities were so large and extensive that a bilateral ligation at the saphenous-femoral junction was advised, and on June 6, 1936, that operation was performed. The remaining patent varicosities were treated by injections of sodium morrhuate. Even though she had received fourteen weekly injections of 5 per cent sodium morrhuate in doses varying from 0.5 to 2.0 c.c., the fifteenth injection on October 22, 1936, elicited immediate complaints of dizziness, difficulty in breathing and a tightness in the chest. There was spasmodic coughing and some expectoration. On examination, diffuse râles were heard over the entire chest, and the breath sounds were indistinct. The radial pulse was slow and poor in quality. The patient was given 10 minims (0.6 c.c.) of epinephrine, 1:1000, intramuscularly. In twenty minutes the chest complaints were less marked. The injection of epinephrine was repeated. Recovery proceeded rapidly, the dizziness and pulmonary edema gradually disappearing with complete recovery within a relatively short time. An intradermal skin test performed two weeks later was very positive.

In the ordinary gastro-intestinal type of reaction, the patient suffered from abdominal cramps, nausea, diarrhea and an occasional emesis. Three persons manifested gastro-intestinal allergy. Two persons in this series showed symptoms which designated cerebral involvement.

TABLE IV.

Incidence of Allergic Reactions to Sodium Morrhuate

| Reference | No. of Reactions | No. of Pts. Treated | Incidence of Reactions to No. of Pts. Treated | Total No. of Injections | Incidence of Reactions to Total No. of Injections |
|---|---|---|---|---|---|
| North End Clinic | 16 | 938 | 1.706% | 10,510 | 0.152% |
| Praver and Becker[8] | 7 | 176 | 3.977% | 783 | 0.894% |

TABLE V.

Incidence of Type of Allergic Response to Sodium Morrhuate

| No. of Reactions | Dermatological Allergy | Respiratory Allergy | Cerebral Allergy | Gastro-intestinal Allergy | Allergic Shock |
|---|---|---|---|---|---|
| 16 | 12 | 5 | 2 | 3 | 4 |
| Incidence | 75.0% | 31.25% | 12.50% | 18.75% | 25.00% |

The most severe of all allergic reactions was anaphylactic shock with resultant coma, collapse, loss of pulse, and in some cases convulsions and shock. Anaphylactic shock may, or may not, be preceded by cutaneous, respiratory, cerebral, or gastro-intestinal reactions. A gastro-intestinal type of reaction preceded the anaphylactic shock in Case 5.

Mrs. R. G., aged fifty-two, gave a negative history of allergy, but a positive history of diabetes mellitus. Chief complaint was of marked varicose veins, present for twenty years. During the period from November 14, 1930, to July 3, 1932, the patient received a number of injections of 20 per cent saline-glucose solution with moderate success. She returned on April 21, 1933, and was given weekly injections of 1-2 c.c. of 5 per cent sodium morrhuate. Returned a second time on March 14, 1935, for weekly injections of the same sclerosing agent. On April 4, 1935, she received 1.5 c.c. of 5 per cent sodium morrhuate. About seven minutes later, the patient felt dizzy and warm, complained of generalized weakness, a sinking sensation in the abdomen, nausea and upper epigastric pain. After a few minutes she collapsed and was given 10 minims

TABLE VII.—SUMMARY OF CLINICAL DATA

| No. | Name Age Sex | Site of Varicosities | Date 1st Treatment | Frequency of Rx's. | Amount Injected | Date of Reaction | Shocking Dose | Symptoms | Results Thrombosis | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | A.M. 40 F | Left leg 1 yr. | 3–28–35 | Third weekly injection | 1½ c.c. 5%* | 4–11–35 | 1½ c.c. 5%* | Developed urticaria 4–12–35 | Fair | Marked swelling and pain. Periphlebitis. |
| 2 | J.G. 45 F | Bilateral legs—14 yrs. | 3–12–36 | q. 1 wk. | 2 c.c. 5% | 10–22–36 | 2 c.c. 5% | Immediate urticaria, dyspnea, syncope, pulmonary edema. | None | Intradermal test very positive. |
| 3 | L.S. 39 F | Bilateral legs—10 yrs. | 7–1–37 | q. 1 wk. | ½ 2 c.c. 5% | 4–6–39 | 2 c.c. 5% | Immediate pruritus, urticaria, cramps, collapse, vomiting. | Fair | Urticarial reaction 3-16-39. Present reaction required hospitalization. |
| 4 | M.C. 42 F | Bilateral thighs—6 yrs. | 5–7–36 | q. 1 wk. | ½ 1 c.c. 2% sodium ricinoleate | 3–2–39 | 1 c.c. 2% sodium ricinoleate | Urticaria followed by marked hoarseness and pain in throat. | None | Reaction after resection and sodium morrhuate 6-2-38. Also 12-1-38. |
| 5 | R.G. 52 F | Bilateral legs—20 yrs. | 11–14–30 | q. 1 wk. | 2 c.c. 5% | 4–11–35 | 1½ c.c. 5% | Immediate, gastric pain, nausea, comatose, marked shock. | Fair | Very severe reaction. Occurred on 2nd injection after resumption of treatment. |
| 6 | R.D. 47 F | Bilateral legs—15 yrs. | 10–28–37 | q. 1 wk. | 1 2 c.c. 5% | 3–10–38 | 1½ c.c. 5% | After ten minutes, syncope, hypotension, erythema, dyspnea. | Fair | Psychogenic factor strong. Tests negative. |
| 7 | S.K. 54 F | Bilateral legs—7 yrs. | 3–27–31 | q. 1 wk. | 2 c.c. 5% | 9–24–36 | 2 c.c. 5% | On return home eyes swollen, pruritus, generalized urticaria. | Poor | Relieved by epinephrine. Occurred on 2nd injection after resumption of treatment. |
| 8 | S.S. 54 F | Right leg 8 yrs. | 2–29–40 | Fifth weekly injection | ½ c.c. 5% | 3–28–40 | 1 c.c. 5% | Immediate erythema, dyspnoea, felt faint, asthmatic wheezing. | Poor | Relieved immediately by epinephrine 1:1000. |
| 9 | I.L. 43 F | Bilateral legs—17 yrs. | 7–1–37 | q. 1 wk. | 2 c.c. 5% | 10–28–37 | 2 c.c. 5% | Immediate headache, erythema, generalized urticaria, pruritus. | Poor | No future reactions with sodium ricinoleate. |
| 10 | M.N. 40 F | Bilateral 10 yrs. ulcer left leg | 7–19–34 | q. 1 wk. | 2 c.c. 5% | 10–29–36 | 1½ c.c. 5% | Upon injection collapse, tachycardia, Jacksonian type of convulsions. | Good | Recovery in two hours. Glycosuria 4+ after reaction. Previously negative. |
| 11 | J.B. 51 M | Bilateral legs—2 yrs. | 12–10–36 | q. 1 wk. | 2 c.c. 5% | 12–24–38 | 2 c.c. 5% | Fifteen minutes later urticaria, dyspnea, and pulmonary edema. | Excellent | Relieved by epinephrine. Occurred on fourth injection after resumption of treatment. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 | H.B. 33 F | Bilateral legs—5 yrs. | 7–11–35 | First injection | ½ c.c. 5% | 7–11–35 | ½ c.c. 5% | Immediate wheezing generalized urticaria, marked leg swelling. | Skin tests positive. True allergic reaction on first injection. |
| | | | | | | | | Marked pruritus with dermographia. Few urticarial patches. | Previous reaction to sodium morrhuate. Eighth injection of ricinoleate. |
| 13 | T.D. 53 F | Bilateral legs—6 yrs. | 8–5–37 | q. 1 wk. | 2 c.c. 2% sodium ricinoleate | 3–30–39 | 2 c.c. 2% sodium ricinoleate | | |
| | | | | | | | | Severe urticarial response localized at site of injection. | Patient allergic to ragweed. Reaction localized in nature. |
| 14 | S.W. 43 F | Bilateral legs—15 yrs. | 2–16–39 | Fourth weekly injection | ½ c.c. 5% | 3–9–39 | ½ c.c. 5% | | |
| | | | | | | | | Urticaria and pruritus along course of vein. | Skin test positive. Relieved by epinephrine 1:1000. |
| 15 | E.G. 21 F | Bilateral legs and thighs 1 yr. | 6–1–39 | First injection | 0.1 c.c. 5% | 6–1–39 | 0.1 c.c. 5% | | |
| | | | | | | | | Marked pruritus. Pallor. Transient urticaria. Felt faint. | |
| 16 | T.S. 51 F | Bilateral legs—5 yrs. | 10–19–39 | q. 1 wk. | ½ c.c. 5% | 12–7–39 | ½ c.c. 5% | | Symptoms transient. No epinephrine given. |

*Sclerosing material sodium morrhuate unless otherwise specified.

(0.6 c.c.) of epinephrine, 1:1000. Five minutes later the patient became drowsy and semicomatose, followed by twitching movements of the mouth. The left portion of the face became flaccid. The entire chest was filled with diffuse râles. Thirty-five minutes after the onset of symptoms, the blood pressure reading was 50/?. The radial pulse was of poor thready quality. The injection of epinephrine was repeated. Ten minutes later the patient became semiconscious with poor orientation. The blood pressure reading was 82/46. The injection of epinephrine was repeated 25 minutes later. The blood pressure rose to 98/70. The patient was then given 20 c.c. of a 50 per cent solution of glucose with 5 units of insulin intravenously. Approximately 90 minutes after the onset of the symptoms the patient regained full consciousness with a blood pressure reading of 114/68. The pulse, however, was still weak and irregular, with no alleviation of the epigastric pain. The patient's condition rendered hospitalization for two days advisable.

TABLE VI.

Influence of Sex on Incidence of Allergy to Sodium Morrhuate

| Sex | No. of Pts. Treated | No. of Reactions | Incidence of Reactions |
|---|---|---|---|
| Male | 275 | 1 | 0.363% |
| Female | 663 | 15 | 2.262% |
| Total | 938 | 16 | 1.706% |

Sex appeared to be a factor in our series. The ratio of females to males in our series averaged 2.41 to 1, there being 663 women and 275 men. Only one of the men treated suffered a reaction, an incident of 0.363 per cent; while 15 women of 663 treated, an incidence of 2.262 per cent had reactions (Table VI). Thus women were 6.2 times as allergic as the men.

## Conclusion

The usual allergic reaction does not often put the patient's life in jeopardy. Among the sixteen reactors, there was one instance of anaphylactic shock, while three other patients suffered syncope. The underlying mechanism of the production of allergy to sodium morrhuate is not clear. It bears a marked similarity to the production of serum sickness, since only two of the sixteen reactors suffered from an allergic reaction following the first administration of the antigenic substance. The other fourteen cases were instances of acquired allergy, occurring as far along in the course of treatment as the

twenty-third injection. Moreover only two of the reactors gave positive skin reactions to the allergen, and then only after they had suffered reactions. Whether the allergy is due to a protein fraction of the sclerosing substance or to the formation of a hapten is unimportant. The danger of a reaction is always present and generally unpredictable, and, therefore, the more distressing to both physician and patient. Any symptoms referable to allergy should be sufficient indication and warning to discontinue treatment with that particular sclerosing agent.

The treatment of the mild reactions is purely symptomatic; small doses of epinephrine shorten the episode as well as relieve the symptoms; ephedrine by mouth can be helpful. The severe reactions are acute medical emergencies; here again epinephrine is the most valuable agent, and should rapidly be used in full therapeutic doses; ephedrine and similar drugs should not be employed here. No other chemicals are of any significant assistance. Supportive measures should of course be employed; external heat and intravenous glucose seem to be of distinct help. No attempt at desensitization was attempted in any of our cases; we preferred to switch safely to another thrombosing solution.

### Summary

1. Nine hundred thirty-eight patients suffering from varicose veins of the lower extremities were given 10,510 injections of sodium morrhuate from 1930 to 1940. Sixteen allergic reactions to that substance occurred.

2. Two reactions followed the initial injection of the sodium morrhuate; two occurred on the second to the fourth injection; five occurred after the fifth injection; three occurred on the second to fourth injections following the resumption of treatment, and four after the fifth injection following the resumption of treatment.

3. Skin tests were positive in only two cases; two reactors subsequently gave reactions to sodium ricinoleate; and one person also had hayfever.

4. Our incidence of reactions compared most favorably with the incidence reported elsewhere.

5. Allergy to sodium morrhuate presented itself symptomatically as (a) dermatological, (b) respiratory, (c) cerebral, (d) gastro-intestinal, and (e) anaphylactic shock.

6. Sex appeared to be a factor in our series of cases. Women were markedly more susceptible to reactions than men.

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MSMS

# A Method for Correction of Angulation in Fractures of Long Bones

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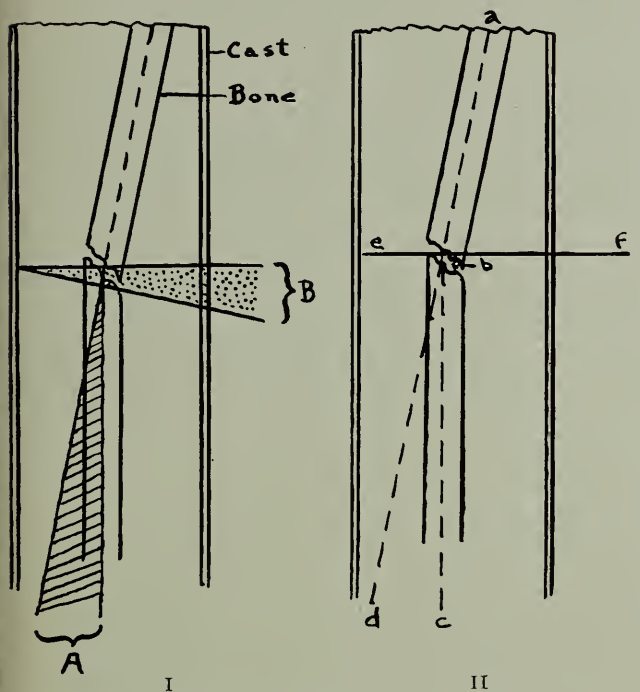
■ The general practitioner frequently encounters some difficulty in correcting angulation deformities following fractures of long bones. We wish to emphasize a method well known to orthopedic surgeons; namely, cast wedging. We believe that an accurate correction is possible by simple means.

After a fracture is reduced, checkup x-ray films should be taken to determine if proper alignment of fragments has been obtained. The radiologist should determine, by means of a protractor, any angulation present in one or both planes, and state the degree and direction of angulation in his report to the physician. This done, correction of any existing angulation then

is made possible by a number of methods. We have suggested two methods and in twenty cases where they have been utilized excellent results have been obtained.




Method I. A—Degree of angulation. B—Wedge. A = B.
Method II. Abc—Line of angulation. abd—Corrected line ef. Circular cut.

### Method I

A wedge of cardboard or thin lead is cut to correspond exactly to the degree of angulation measured from the film of the bones involved in the fracture. The cast is then cut circularly at the fracture site three-fourths of its circumference and the distal portion of the cast with its encased soft tissues and bones is moved in the proper direction so that the cardboard wedge fits snugly into the widened circular cut. An assistant then holds the extremity in the new position, or the position is maintained by the use of a Hawley table. New plaster is applied over the site of the inserted wedge and the extremity held in position until drying is complete. If angulation is present in two planes, another circular cut immediately above or below the previous cut in the cast is made and the proper wedge is inserted at right angles to the first wedge and the above procedure repeated. We have had no ill effects due to soft tissue swelling at the fracture site. This method, of course, is only applicable to non-comminuted fractures unless pin traction is employed.

### Method II

A second method is to draw lines on the cast showing the degree of angulation as seen on the x-ray film. The cast is then cut circularly at the site of fracture and the lower fragments bent until the previously drawn angulated line becomes a straight line. If the angulation is in two planes the same procedure may be repeated for the other plane of angulation. If angulation is only in one plane it is well to draw a straight line in the other plane so that during correction one does not make a new angulation in this second plane. This will not occur if care is taken to keep the latter line perfectly straight. The method is particularly useful where pin traction is employed.

MSMS

# Severe Fractures of the Ankle Joint

## Conservative Management and a Presentation of Typical Cases

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It is well known that fractures of the ankle may at times offer very difficult problems. The end results have often been a permanent disability in the patient and a sad disappointment to the physician. Mutilation of the bones and soft tissues about the ankle, produced by direct violence, represent the worst injuries. Fortunately, such occurrences are infrequent, but when they are seen, one has to make the best of a bad situation.

The many types of ankle injuries are well described in most of the modern textbooks[8,10] and Ashhurst and Bromer[1] gave a complete classification of ankle fractures based on the application of the force which may produce them. In a recent publication, Carothers[4] has suggested a

classification that is rather simple and based on injuries of the ankle joint with or without displacement of the astragulus.

The most serious fracture of the angle produced by indirect violence is the one in which both internal and external malleoli are separated and displaced together with the fracture and displacement of a portion of the lower, posterior articulating surface of the tibia. Henderson and Stuck[9] in 1935 called it a "trimalleolar fracture," which is a convenient descriptive term but not anatomically correct, since the lower, posterior joint lip of the tibia is not a true malleolus. Although this injury of the ankle was described by Sir Astley Cooper in 1832, Cotton[5,6,7] in 1915 stimulated new interest and pointed out the serious consequences that arise if the posterior dislocation was not recognized and reduced. This new interest has been manifested to a large extent in attempts to properly treat this injury so that the best results may be obtained.

There are those who believe an open reduction and internal fixation of the posterior tibial fragment is the best means of maintaining a satisfactory alignment of the fracture. Lounsberry and Metz[3,11,12] first suggested this method, which is now used almost routinely by some, particularly when the posterior tibial fragment involves one-third or more of the lower articulating surface. On the other hand there are those who have had equal success with combined manipulation and traction methods and Bohler[2] contends that open reduction is never indicated. However, it is obvious that the object in both methods is to anatomically reduce and maintain the alignment of the posterior tibial fragment, which is the factor that gives the most trouble and makes the fracture a mean one to deal with. The literature during the past few years contains a variety of discussions on the management of this injury. To study the methods of treatment gives one the impression that some seem too radical and others too conservative. To attempt to achieve success in the treatment of a trimalleolar fracture simply by manipulation and application of a plaster cast, one certainly has to be an optimist. On the other hand, the routine use of open reduction and fixation in treating every case, makes one appear to be a pessimist. Therefore, it seems that if a standard or routine method would be used, it is better to take the middle ground. I have found the use of manipulation with traction to be quite adequate in the meanest trimalleolar fractures of the ankle and the results obtained have been gratifying.

In the treatment of fractures of the ankle the mechanism of the force producing the fracture should be taken into account as this knowledge facilitates the reduction. Indirect force on the plantar flexed foot, or sometimes a combination of extreme plantar flexion, abduction and external rotation, is responsible for a trimalleolar fracture. The astragulus is driven against the lower, posterior, articulating margin of the tibia resulting in a fractured fragment at this point of the tibia. Continuation of the force on the unrestrained foot causes a severe tug on the deltoid and lateral ligaments which produces the fractures of the medial and lateral malleoli and a posterior dislocation of the astragulus. If the fracturing force is directed more directly against the lower end of the tibia, then a comminuted or T-fracture may occur associated with injury to the tibiofibular ligament. Rupture of the ligament between the lower end of the tibia and fibula widens the space between the bones at this point and the astragulus dislocates laterally. A force directed anteriorly against the lower, articulating surface of the tibia may produce a fractured fragment of the anterior margin with forward dislocation of the astragulus; however, such injury is very uncommon. Therefore, in reduction it is necessary to use manipulation that opposes the forces that produced the injury.

Even in trimalleolar fractures with dislocation of the astragulus, it is possible to have different degrees of injury. A "classical" fracture is the worst in that the tibial fragment usually comprises one-third or more of the articulating surface, whereas a "minimal" fracture consists of a much smaller tibial fragment. This distinction in the size of the tibial fragment has been a deciding factor in the treatment, indicating open reduction in the classical type and more conservative methods for the minimal fracture.

No attempt is made to suggest any new method of treating fractures of the ankle or to detract from various treatments that are now in use and giving good results. The purpose is simply to demonstrate, by these cases, the results obtained by the use of manipulative reduction and maintenance with the aid of steel pins used in traction and incorporated in a plaster cast. I believe the method to be safe, simple and quite

satisfactory in the treatment of some of the worst fractures of the ankle.

### Technique

Early reduction is always advisable, unless, of course, other more severe injuries demand first attention. Soft tissue swelling, pain and some degree of shock are minimized by early treatment. The patient lying on his back, the foot and leg are surgically prepared. Novocain is infiltrated into the skin over the os calcis and upper portion of the tibia medially and laterally. Infiltration may then be made into the hematoma within the ankle joint and shortly pain is entirely relieved. A steel pin is placed through the upper, posterior portion of the os calcis and another through the tibia just below the tubercle. To retract the skin toward the knee before inserting the upper pin will avoid tension against the skin at the pin holes. The foot and leg is gently supported as it is placed in a traction apparatus and the pins locked in place. Support is continued until sufficient traction is made to reduce the astragulus. The foot and leg is then elvated until the knee is flexed from forty-five to seventy degrees from complete extension and thereby the gastrocnemius muscle is well relaxed. The foot may then be moved without restraint. Digital pressure over the tibial fragment and movement of the foot to relax the tendons over it will disengage the fragment and contribute to the ease of its replacement. The foot then is slightly dorsi-flexed for a posterior tibial fragment or plantar-flexed for an anterior fragment, causing tendon pressure over the fragment to aid in holding it in place. Bilateral pressure with the palms of the hands or a padded Forrester clamp will restore normal relation of the tibia and fibula if the space between them has been widened by injury to the tibiofibular ligament. Internal rotation of the foot usually aligns the lower end of the fibula and adduction returns the medial malleolus of the tibia to its normal position as well as to approximate the lacerated fibers of the deltoid ligament. Radiographic studies should then reveal the astragulus fitting snugly in the mortise formed by tibia and fibula and the posterior or anterior tibial fragment must restore a smooth articulating surface. Plaster is then applied following a light padding over the upper portion of the fibula, the patella, the ankle medially and laterally, the Achilles tendon, the plantar surface of the foot and the heel. The steel pins are incorporated in the plaster which is wound from the toes to the middle of the thigh. The foot, leg and knee are encased in whatever position they may be when the satisfactory reduction has been obtained, as any change to a neutral position may result in the loss of the anatomical alignment. Shortly, when the plaster has set, the leg is removed from the traction apparatus and the patient sent to his room. The foot and leg is elevated rather high on pillows to allow recession of the swelling of the soft tissues. A window cut in the cast over the anterior portion of the ankle and knee adds to the patient's comfort. Of course, close observation of the circulation in the extremity is watched for at least forty-eight to seventy-two hours, as a circular cast always carries the danger of being too tight. Hospitalization after reduction usually affords more convenience to the physician; however, it is not imperative and the patient may convalesce at his home if he so desires. The cast should not be removed for five or six weeks. After this time a lighter, skin cast with a walking iron should be applied with the foot in a neutral position and the knee only slightly flexed. The walk-

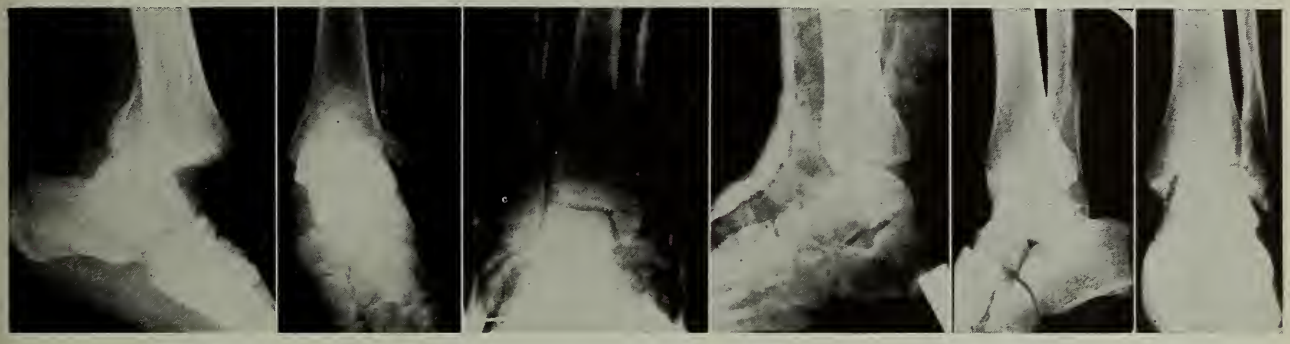

Fig. 1. Case 1.

ing cast may be used for another five or six weeks, after which weight bearing on the ankle is allowed. A leather ankle brace or a high top shoe with an arch support is desirable for two or three months.

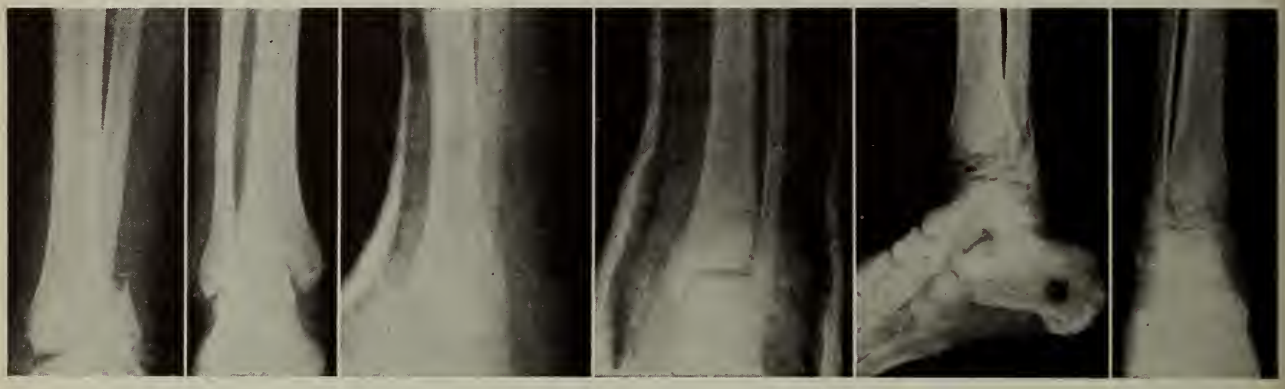

Fig. 2. Case 2.

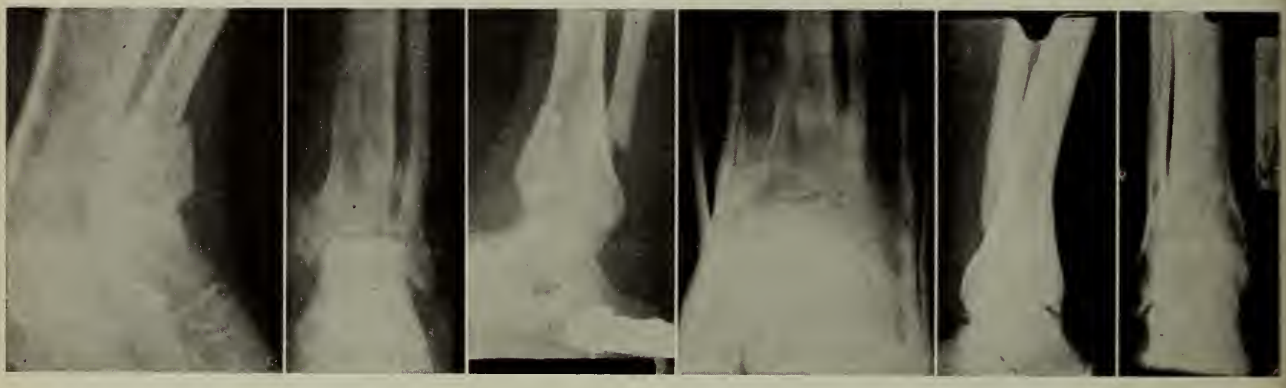

Fig. 3. Case 3.

Case 1. J.V.W., male, age 22, case number 34721. Trimalleolar fracture of the right ankle produced by sliding into a base during a game of baseball. Immediate reduction and final result good. (See Fig. 1.)

Case 2. M.G., male, age 45, case number 59283. Trimalleolar fracture of the right angle. The patient slipped on a wet tile floor. The foot was plantar flexed and externally rotated as he sat forcefully on the foot in the fall to the floor. Immediate reduction and a good result. (See Fig. 2.)

Case 3. R.K., male, age 28, case number 43131. Severely comminuted fracture of the right ankle. The patient was in an automobile accident. The patient was riding in the rear seat with his foot braced against a foot rest. The astragulus was apparently driven directly against the lower, articulating surface of the tibia. The skin remained unbroken. The patient was brought in for treatment ten days after the injury, following which there had been no attempt to reduce the fracture. Under spinal anesthesia, the fracture was manipulated to disengage the fractured fragments and then reduction by traction and molding of the ankle was carried out. A good result was obtained in this case. (See Fig. 3.)

## Conclusion

The most severe fractures of the ankle may be treated with satisfactory results by combined manipulation and traction in which alignment of the fractured fragments is maintained by incorporation of the traction pins in an adequate plaster cast.

No ill effects have been observed by keeping the knee flexed or the foot out of neutral position during the first few weeks of treatment.

Satisfactory reduction is possible and may be maintained without the use of a third traction pin through the metatarsals for a forward pull on the foot. Traction in the long axis of the leg with variation in the position of the foot seems to accomplish in ankle fractures what a metatarsal traction wire may offer.

Local anesthesia in many fresh fractures of the ankle affords complete freedom from pain

and a great advantage in its use is that the cooperation of the patient may be had during the process of reduction. The consciousness of the patient is very helpful in that his comfort is better assured as the cast is applied and immediately following the procedure. Seldom is it necessary to make alterations later if the patient leaves the operating room conscious and comfortable.

No ill effects have been observed by allowing weight bearing on the injured ankle at the end of three months following the use of a walking cast.

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## MSMS

### WAYNE SPEECH CLINIC ADDS NEW EQUIPMENT

Wayne University's speech-correction clinic will be equipped this year with one of the newest instruments known in its field: a new type of electro-kymograph, for measuring and recording breathing patterns.

The device, the only one of its kind in Detroit, was donated to the university last year by Beta Sigma Phi Fellowship, a social-scientific group of persons holding graduate degrees from Wayne.

The speech-correction clinic, located at 4735 Cass, near Hancock, offers a special class for adult stutterers, which meets Mondays and Thursdays at 7:00 p.m. There is also a children's clinic, for help in every type of speech difficulty, on Saturdays at 9:00 a.m. The class for adults is available without credit at the usual university class fee; the children's program, similar to that in which 60 youngsters were treated regularly last year, is available at nominal fees. The work is directed by Prof. Eugene Hahn, authority on the treatment of speech difficulties.

The clinic offers academic laboratory experience to Wayne students training to be teachers of speech correction, and also functions in improving the speech of the university students themselves.

The Wayne program functions in coöperation with the speech correction program in the Detroit public schools, which is supervised by Miss Hildred Gross. Most of the cases in the schools are cared for in the 150 centers maintained by the Board of Education in various school buildings.

# Hypothyroidism in Children

## A Review of Masked Symptoms and Evaluation of Response to Thyroid Treatment


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■ Considerable literature has accumulated on hypothyroidism in general but it seems that a scarcity exists in pediatric writings, especially concerning mild or borderline types, and it is in some measure the reason for this report on a number of interesting observations made upon forty-one patients between the ages of nine months and fourteen years.

Among the recent authors interested in the subject are: Shelton;[7,8] Topper;[10] Cattell;[3] Dorff;[4] Brown and associates;[1] Wilkins;[12] Watkins;[11] and Rose.[6]

Dorff[4] appears to have coined the term "masked hypothyroidism" as a description for his cases "since the symptoms are misleading and often go unrecognized unless properly studied and interpreted."

Rose[6] wrote that "the term 'paradoxical hypothyroidism' is applicable to a group of patients in whom thyroid deficiency produces an almost complete reversal of the classic picture. They are nervous and irritable, undernourished and sometimes complain of palpitation and tachycardia . . . their only characteristic symptoms are apt to be fatigability and intolerance to cold, yet they respond promptly as a rule to desiccated thyroid."

We are reporting observations made upon a group of patients who show disturbances which may well be metabolic disorders closely related to hypothyroidism. Because of the lack of a better explanation of the etiology, as well as evidence of satisfactory response to thyroid substance in the majority of cases, we believe the diagnosis of "masked hypothyroidism" can be applied to most of this group.

Because retardation in carpal bone development and a low basal metabolic rate are agreed upon by most writers on the subject as laboratory evidence of hypothyroidism, we have used these criteria as aids in classifying our cases. All of the children have had either one or both examinations included in their case studies. The examination of x-rays of the bones as well as a complete physical examination seems sufficient to rule out other causes of bony retardation as mentioned by Dorff,[4] i.e., "rickets, mongolism, celiac disease, congenital syphilis, et cetera." It is also felt that other causes for hypometabolic states discussed by Watkins[11] can be ruled out.

Among the total number (forty-one) of children, twenty-seven were male; fourteen were female. A definite family history of thyroid disturbances was obtained in twelve cases. There were four families in which two siblings showed similar symptoms. Twenty-eight of the children were of school age.

Of the twenty-five children who had x-ray examinations for carpal development, twenty-two showed definite delay in osseous growth of more than six months when compared to the standards published by Wingate Todd.[9] Three children showed development considered normal or with less than six months' retardation. One patient in the latter group had a metabolic rate of minus twenty-six. The other two patients in addition to having symptoms and findings similar to the group described below, gave a history of their mothers having low metabolism rates and both were taking thyroid medication while we were making these observations upon their offsprings. It may be supposed that if our diagnosis is correct, the onset of hypothyroid symptoms has been so recent that no delay was demonstrable at present.

Of the seventeen patients who were considered old enough for satisfactory basal metabolism tests, fifteen showed low readings ranging from minus seventeen to minus thirty-six. The other two children were found to have a minus two and a minus nine rate respectively.

A review of the histories showed that the most prevalent complaint was frequent upper respiratory infection. Twenty-two are in this group. Most of the children had been on the usual vitamin mixtures and iron tonics. Many had had so-called "cold vaccines" and ultraviolet light treatments. About half of these children had already been subjected to removal of tonsil and adenoid tissue without any relief from recurrent upper respiratory bouts. The parents of the remaining number wanted advice on tonsillectomy, and it was for this reason that we were asked to see the patients.

An interesting group of findings in the nose were either observed at the time of examination or symptoms originating in the nose were complained of by the parents or children in seventeen cases. So far as we know, a similar reference to these findings does not appear in pediatric literature, although certain internists and otolaryngologists have described mucous membrane pathology in hypometabolic states. Lee,[5] in 1925, wrote of the relationship of vasomotor rhinitis and hypothyroidism. More recently, in 1936, Bryant[2] called attention to the tendency in metabolic disturbances of infections such as repeated colds, and made a plea for consideration of hypothyroidism in cases which did not respond to ordinary therapeutic efforts. The membranes of the turbinates viewed from the anterior nares, showed a pale, waxy, boggy appearance unless there was a superimposed infection, in which case the boggy turbinates were red and showed marked capillary injection. There often was an excessive thin mucoid discharge similar to that seen in an allergic rhinitis. It seemed to us that the discharge in these cases was thinner than in the case of uncomplicated allergy, although in making a differential diagnosis many times repeated nasal smears were checked and it was not until several smears were found to be negative for eosinophilia that we could be sure that an allergic membrane was not being observed. As a result of the marked swelling of the nasal mucosa, many of these patients complained bitterly of nasal obstruction and often sleeping, studying and physical activities were necessarily curtailed. In some of these children, pale edematous membranes extended into the pharynx and a few had a boggy appearing uvula. Although four of the children showing the above symptoms were known to have a seasonal pollinosis, these mucous membrane findings and repeated nasal smears were made during the winter months when the known irritants had ceased to exist.

Twenty of the children showed hyperactivity on examination or were described by parents and teachers as restless, fidgety children. Excessive activity is not a symptom commonly recalled to mind in hypothyroid individuals. Quite the reverse is true. We are used to associating apathy and sluggish reactions with hypothyroidism. In Dorff's[4] report which we mentioned previously, are several cases which were restless and unstable and appear to be comparable to the animation exhibited in part of our group.

A group of twelve patients who showed hyperactivity also presented lack of attention, anorexia, small stature, nervousness, simian-like behavior, and irritability; and resemble the group described by Rose[6] as examples of "paradoxical hypothyroidism." This term certainly is an apt one, for these little individuals suggest "hyper" rather than "hypothyroidism."

Shortness of stature was a significant finding in eleven subjects.

Obesity was present in eight patients, and was treated by thyroid substance as well as a twelve or fifteen hundred calorie diet in the more extreme cases.

Slowness in school was an important complaint in eight children.

Irritability and chronic fatigue each were found as noteworthy complaints in eight records.

Hypogenitalia was present in five male children and was accompanied by undescended testes in two instances.

Five patients showed a tendency to a persistent anemia of a hypochromic type.

Constipation was an important complaint in two histories.

### Results of Therapy

The results of therapy were studied and the progress of each case was summarized and seems best expressed in degrees of improvement observed as indicated below:

| | No. Cases |
|---|---|
| Marked improvement of major complaints | 21 |
| Moderate improvement of major complaints | 9 |
| Slight improvement of major complaints | 8 |
| No improvement of major complaints | 2 |
| Insufficient time elapsed to make a report | 1 |

### Discussion

The frequence of repeated upper respiratory infection as a complaint and the large proportion of children in this group who complained of nasal obstruction or who showed boggy, waxy, turbinates, brings out the point discussed by Bryant[2] and already alluded to earlier in this paper, that patients who, after adequate vitamin therapy, iron medication, and improved local as well as general hygiene, still are having repeated symptoms of disturbed respiratory tract membranes should be considered as possible hypometabolic or hypothyroid patients and should be investigated accordingly. From our experience we feel that some improvement will be obtained in many, although we readily admit that this will not be true in every stubborn case, as thyroid substance is not a panacea and the cases must be carefully studied and classified. Fourteen of the twenty-two children who had chronic respiratory infections as a chief complaint showed marked improvement and eleven of the children who showed the turbinate mucous membrane changes, exhibited satisfactory improvement while under treatment.

Bryant[2] mentioned that other chronic infections which persist in spite of the usual or accepted treatment should be considered as possible hypometabolic disturbances. We feel that a few cases under our observation bear this out. Three of the children in this report had repeated styes which persisted although all common means of preventive treatment were used. After the children were found to be hypometabolic problems and treated with desiccated thyroid, the lids became more resistant to infection and all three have been without the appearance of new styes for several months. Another example is the case of a girl of two and a half years who suffered from recurrent pyelitis and bouts of high fever over a period of six months in spite of every effort of two pediatricians and a urologist to keep the urinary tract free from infection. She was finally examined for possible metabolic disease and was found to show marked delay in carpal development and subsequently was given desiccated thyroid and has remained free from fever and the urinary tract free from pus and demonstrable bacteria for several months.

About half of the children showing hyperactivity as a chief complaint were definitely improved and appeared less restless.

One-half of the children in the smaller group who showed lack of attention, anorexia, small

stature, nervousness and irritability in addition to hyperactivity and which we have grouped as examples of "paradoxical hypothyrodism," showed marked improvement while under thyroid medication.

Those children who showed short stature, obesity, slowness in school, irritability, fatigue, hypogenitalism; anemia and constipation were found to respond to the medication in sufficient numbers to please the parents and to encourage us to study children showing similar complaints with a certain degree of optimism.

The accompanying table indicates the amount of improvement noted in each important clinical finding or complaint.

| Clinical Findings | Number of Cases Showing Degrees of Improvement | | | | |
|---|---|---|---|---|---|
| | Marked | Moderate | Slight | None | No Report* |
| Repeated U.R.I. | 14 | 6 | 0 | 2 | 0 |
| Dry hair and skin | 6 | 5 | 2 | 3 | 1 |
| Nose symptoms | 11 | 5 | 0 | 1 | 1 |
| Hyperactivity | 10 | 10 | 0 | 0 | 0 |
| Paradoxical hypothyroidism | 6 | 4 | 1 | 0 | 1 |
| Short stature | 6 | 2 | 0 | 0 | 3 |
| Obesity | 3 | 2 | 3 | 0 | 0 |
| Slowness in school | 3 | 1 | 3 | 1 | 0 |
| Irritability | 5 | 2 | 0 | 0 | 0 |
| Fatigue | 5 | 1 | 0 | 1 | 1 |
| Hypogenitalia | 3 | 2 | 0 | 0 | 0 |
| Anemia | 5 | 0 | 0 | 0 | 0 |
| Constipation | 2 | 0 | 0 | 0 | 0 |

*Insufficient time elapsed to judge.

### Summary and Conclusions

1. Children who show extraordinary resistance to the usual management for prevention of repeated upper respiratory and other chronic infections should be studied for possible metabolic disorders.

2. Children who show extreme irritability, restlessness, hyperactivity, anorexia and small stature may be suffering from so-called "paradoxical hypothyroidism" and should be studied with this in mind.

3. The more common findings in hypothyroid cases such as stunted growth, obesity, slowness in school, irritability, fatigue, anemia, and constipation respond to specific treatment in the majority of cases in about the same proportion as the less commonly recognized findings in the borderline or "masked" cases.

4. We hope that this report will stimulate others to prove or disprove our impressions.

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MSMS

# Progressive Pseudohypertrophic Muscular Dystrophy*

## A New Regime of Treatment


By Hira E. Branch, M.D.
Flint, Michigan

HIRA E. BRANCH, M.D.
*M.D., University of Michigan Medical School, 1932. Diplomate, the American Board of Orthopædic Surgery; Member, American Academy of Orthopædic Surgeons, Clinical Orthopædic Society, Detroit Academy of Surgery, Michigan State Medical Society.*


■ THE second sentence of the American Declaration of Independence begins with this statement, "We hold these truths to be self-evident—that all men are created equal." This statement is refuted by many pseudohypertrophic muscular dystrophy individuals. They are not created equal. They are composed of inferior materials and are commonly begot by inferior individuals. The disorder is always based on heredity. The hereditary element has been carefully worked out by Drs. Kostakow and Bodarive at the Medical Clinic of Bonn University. Pseudohypertrophic muscular dystrophy is divided into two types; the infantile, noticed at the age the in-

*Presented before the American Medical Association, New York, 1940.

dividual should start walking, and the juvenile, noticed later in childhood after a period of years when the individual appeared to be normal.

The infantile type of dystrophic muscle appears waterlogged, the individual fibers are degenerated, and fibrous tissue is profuse between the fibers. In fact the moisture content[6] of these degenerated muscle fibers is much higher than normal. This infantile type of muscle is pale and is not vascular on section. Thus we expect all the muscle constituents to be decreased in amount. That is just what we find. The moisture content is increased but the creatin, magnesium and myoglobin are markedly decreased. In fact there was no magnesium in the cases of the infantile type of dystrophy that we biopsied and tested. The magnesium is thought to be very important and I will discuss that later.

The juvenile type is different in that the muscle fibers appear more nearly normal as regards the pigment, size of the fiber and moisture content. However, there is a definite degenerative change present, there is a fat infiltration between the fibers rather than a fibrous infiltration, and there are fewer individual muscle fibers. For this reason we should find a better content of creatin, magnesium and myoglobin in the juvenile type than in the infantile, and I believe most workers find this to be so.

Fig. 1. G. N.—A hopeless untreated case of pseudohypertrophic progressive muscular dystrophy.

Fig. 2. *(from left to right)* S. P., J. L., H. G. All are dystrophic patients. Notice similarity of appearance even though the nationality varies.

Fig. 3. *(from left to right)* S. P., J. L., H. G. Lateral view of children in Figure 2. Notice increased lordosis and prominent abdomens. Contractures of H. G.'s feet have been corrected by stretching and casts applied to hold the correction.

The above introductory remarks are made to emphasize the point that these unfortunates have not been created equal and are inferior. The

musculature is inferior as the above proves. The mentality is inferior as has been shown by mental tests in every one of my cases.

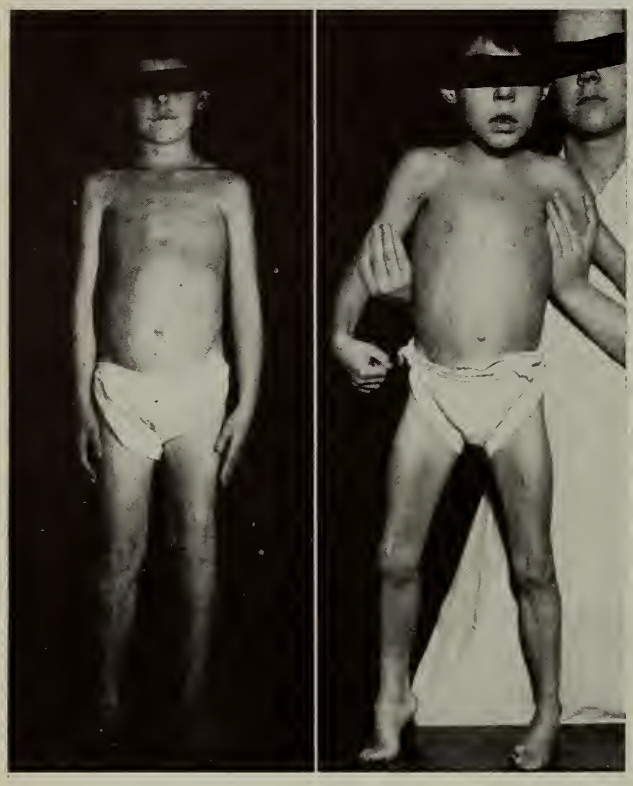

Fig. 4. H. L. *(left)* showed gradual improvement but regressed somewhat after treatment was stopped in June, 1939.
Fig. 5. A. V. *(right)* plainly shows a low mental age. Contractures shown at start of treatment were corrected only to recur during a long illness due to bilateral ear and mastoid infections.

### Previous Methods of Treatment

There have been many methods of treatment for pseudohypertrophic progressive muscular dystrophy. They have all failed to cure. They were doomed to failure from the start for no one should expect to make normal muscle where there is no normal muscle. The object of treatment is to take the inferior musculature of the dystrophic individual, and make available to this muscular system the substances necessary for the efficient functioning of that system. In addition to having the substances available, there must be given something that will make possible the utilization of these substances by the muscles.

The glycine treatment has been used extensively. It has not benefited the dystrophy patients treated at the Children's Hospital of Michigan. Other workers and clinics have not found glycine beneficial in pseudohypertrophic muscular dystrophy. The glycine treatment is based on a false premise. It is based on the assumption that feeding glycine results in an increase in the creatin excretion in the urine, the mechanism of which causes a beneficial effect upon the muscles. It is true that feeding glycine causes an increase of creatin in the urine *but we do not want this.* We want to increase the creatinin excretion, not the creatin. The administration of glycine exerted little influence on the creatinin excretion. In general,[2] the greater the deviation of creatinin excretion below normal, the greater is the patient's disability. Thus although the glycine treatment increased the creatin excretion it had little or no beneficial effect upon the creatinin excretion, or the dystrophic individual.

Further convincing proof of the glycine false premise is easily seen in the following table. This table is postulated on the basis of the work of P. Eggleton, G. P. Eggleton and Lundsgaard, as epitomized by A. V. Hill: The Revolution in Muscle Physiology (Physiol. Rev., 12:S6 [Jan.] 1932).

| | |
|---|---|
| Carbohydrates | Amido-acids |
| Glycogen | Creatin plus Phosphates |
| Lactacidogen | Phosphagen |
| Lactic Acid | |
| Amount proportionate to amount of muscular energy developed | During muscular contraction phosphagen is split into creatin and a phosphate by which energy for contraction is set free. After contraction the lactic acid appears, phosphagen is restored. (Creatinin, one of the by-products, is excreted.) |

The accompanying table shows that creatin is necessary to the normal functioning of muscle. Creatin is present in the urine of dystrophic individuals to an extent much greater than normal while creatinin is commonly less than normal. Glycine treatment increases the creatin excretion but not the creatinin. This is not a beneficial effect, for there already is too much creatinuria. Therefore, in dystrophies the creatin does not get into the muscle or the muscle is unable to utilize it. What is needed then is something that will make the creatin in the body available so that it may be utilized by the muscle and accordingly increase the amount of creatinin excreted. If either the creatinin excretion alone or

both the creatinin and creatin excretions be increased then it should indicate an improvement in the progressive muscular dystrophy individuals.

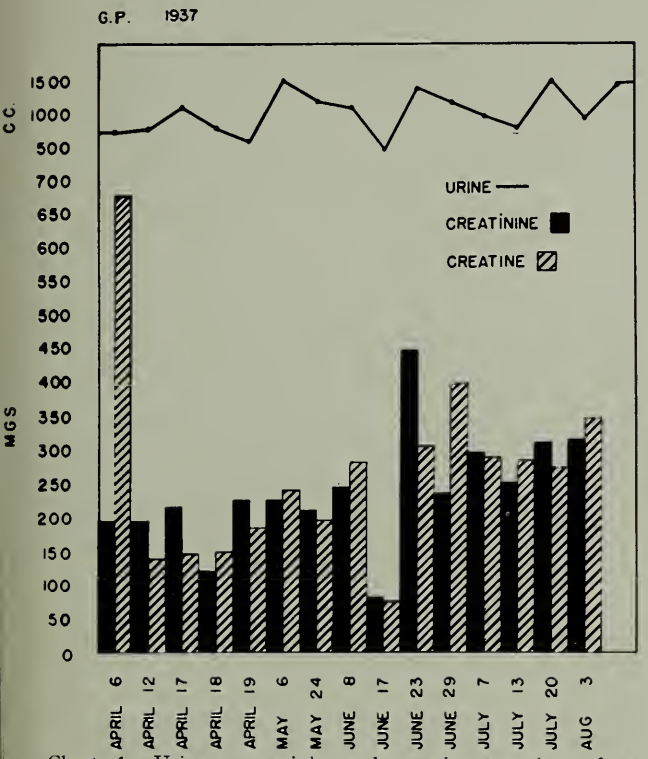


Chart 1. Urinary creatinin and creatin excretion of an advanced case of pseudohypertrophic progressive muscular dystrophy. There is a distinct rise in the creatin output which indicates an improvement in the individual.

## Development of a New Regime

In the development of a new regime of treatment there are certain facts that are known about progressive muscular dystrophy that are listed below:

1. The outstanding one is the increase of creatin in the urine.
2. The gradual replacement of the degenerating muscles by infiltration of fat.
3. The marked decrease to total absence of magnesium in the muscle.
4. The decrease of myoglobin in the muscle.
5. The disease tends to arrest as the individual matures.

There are other factors in addition to those listed but their importance in regard to treatment is not striking. The disconcerting factors are: the disease is hereditary, the musculature is inferior, the mentality is inferior. Therefore a cure is not to be hoped for. However, the pathetic picture of these nice looking, healthy appearing but hopelessly weakened children coming in to the clinic year after year caused me to attempt a regime which might arrest their disease early. I wish to present my rationale of treatment, a few case reports, charts and impressions as a preliminary report so that other workers may prove or disprove the value of this regime.

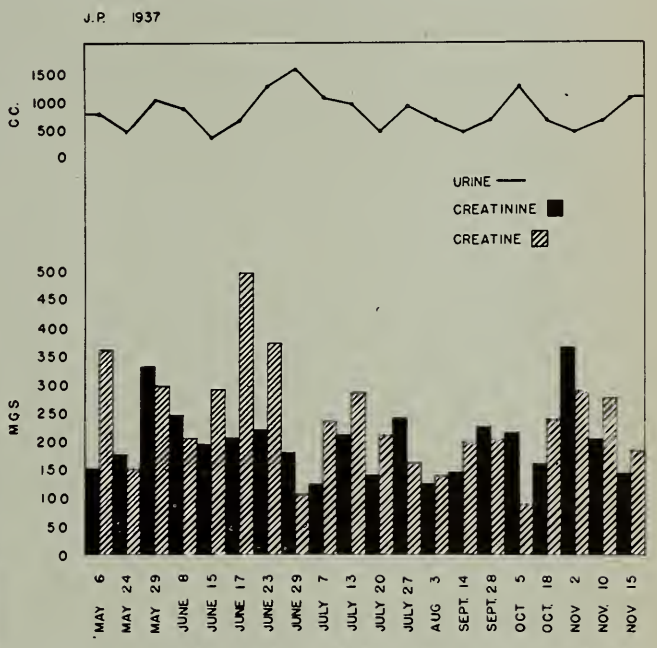


Chart 2. Urinary creatinin and creatin output of an advanced case of pseudohypertrophic progressive muscular dystrophy. The creatinin excretion maintained a high level throughout the experiment and was little influenced by treatment.

## Rationale

I now wish to take individually the known facts listed above and rationalize from them the regime which has given encouragement in this disease.

1. Creatin is materially increased in the urine in pseudohypertrophic muscular dystrophy, during childhood up to ten or fifteen years of age, and in the adult during certain physiologic processes such as lactation, menstruation, or in a variety of pathological processes such as fever, starvation, severe diabetes or other conditions associated with deprivation of carbohydrates. Nutritional creatinuria is easy to correct by regulation of the diet. In fever the creatinuria clears when the temperature remains at normal. In normal adult females there is creatinuria during menstruation and lactation but not at other times. There must be some substance that inhibits the creatin excretion normally or that sets it free during menstruation and lactation. What might it be other than female sex hormone? At any rate if female sex hormone would prevent menstruation, and it will, it might influence creatin in the body so that it could be utilized instead

of excreted. If creatin was utilized then creatinin excretion should be increased in amount. Thus female sex hormone was used in two hopeless patients, first in an effort to work out the dosage and second to see if the creatin-creatinin excretion would be influenced. (See Charts 1 and 2.)

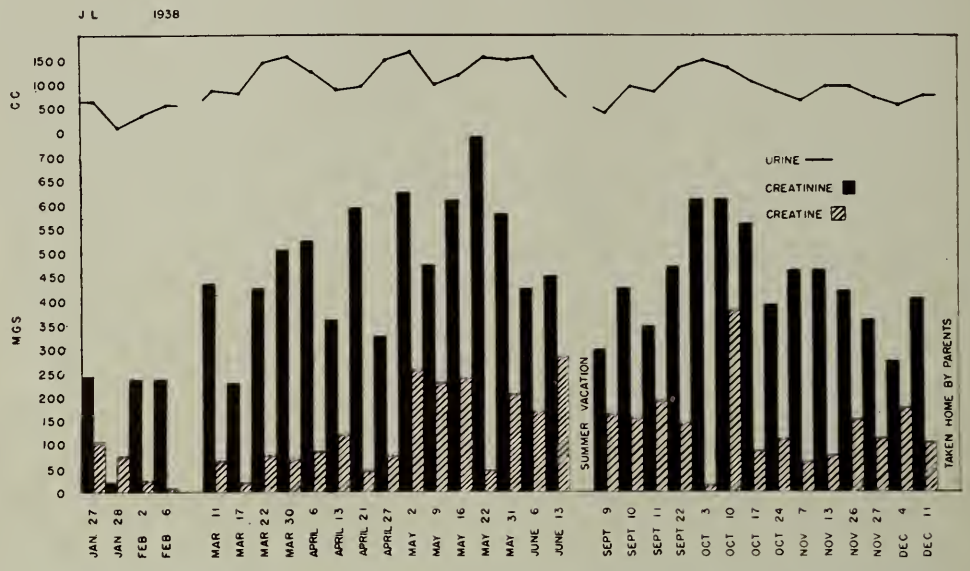


Chart 3. Marked rise in creatinen excretion coinciding with a remarkable clinical improvement.

2. The replacement of the muscles by fat is a disturbing fact and there is nothing similar in normal individuals. Perhaps this is due to a disturbance in the metabolism of fat. A search was made for a drug that would influence fat metabolism.

It is known that the presence of choline in the diet of rats favors the normal distribution of fat[8] between the liver and the body depots, and prevents the failure of certain functions of the liver. Choline has been shown to exercise prophylactic and curative effects[2] on the "fat" fatty liver and the "cholesterol" fatty liver of rats produced under a variety of experimental conditions. Diets deficient in choline and other lipotrophic factors[3] produce an accumulation of fat in the livers of white rats. In these rats the administrations of choline always prevent the deposition of liver fat, and under certain conditions it appears to act favorably on the gain in weight of the animals. The results of experiments suggest that choline may improve the "general condition" of the rats. Homocholine[5] (trimethyl-y-hydroxypropyl-ammonium hydroxide) is stated to be more effective in controlling the percentage of fat in livers than is choline. The action is similar in that on "cholesterol" fatty liver the main effect is to decrease substantially the glycerine content of the livers and to a lesser extent the cholesteryl ester formation. Thus it seemed that if these drugs influenced fat metabolism in rats they might in humans. Homocholine was not readily available but choline hydrochloride and choline chloride was. Accordingly choline was fed to the pseudohypertrophic muscular dystrophy patients in the hope it might control fat distribution, influence favorably fat metabolism, and improve them "generally."

3. The rôle of magnesium is largely hypothetical. Benjamin Cassen, Ph.D., formerly of Harper Hospital, Detroit, and now connected with Westinghouse Research Department of Pittsburgh, first drew my attention to this interesting and important element. Magnesium is detected in muscle tissue by means of the spectrograph. In the infantile type of pseudohypertrophic muscular dystrophy there were no magnesium bands, in the juvenile type the bands were present and normal in amount.

The role of magnesium has not been definitely proved. However a great deal of circumstantial evidence[4] seems to indicate that cells and muscles, in particular, contain an organo-magnesium compound of non-proteinic nature in which the magnesium is in nonionic form. This compound is a catalyst for the final stage of the combustion of carbohydrate to carbon dioxide and water. It is known that catalysts can catalyze a reaction in

either direction. The inverse reaction, the synthesis of carbohydrates from water and carbon dioxide, is catalyzed by a magnesium containing nonionic substance, chlorophyll.

fibrous tissue that the muscle fibers seem to have little myoglobin and undoubtedly could not use it satisfactorily if they had lots of it. In the juvenile type of pseudohypertrophic dystrophy the

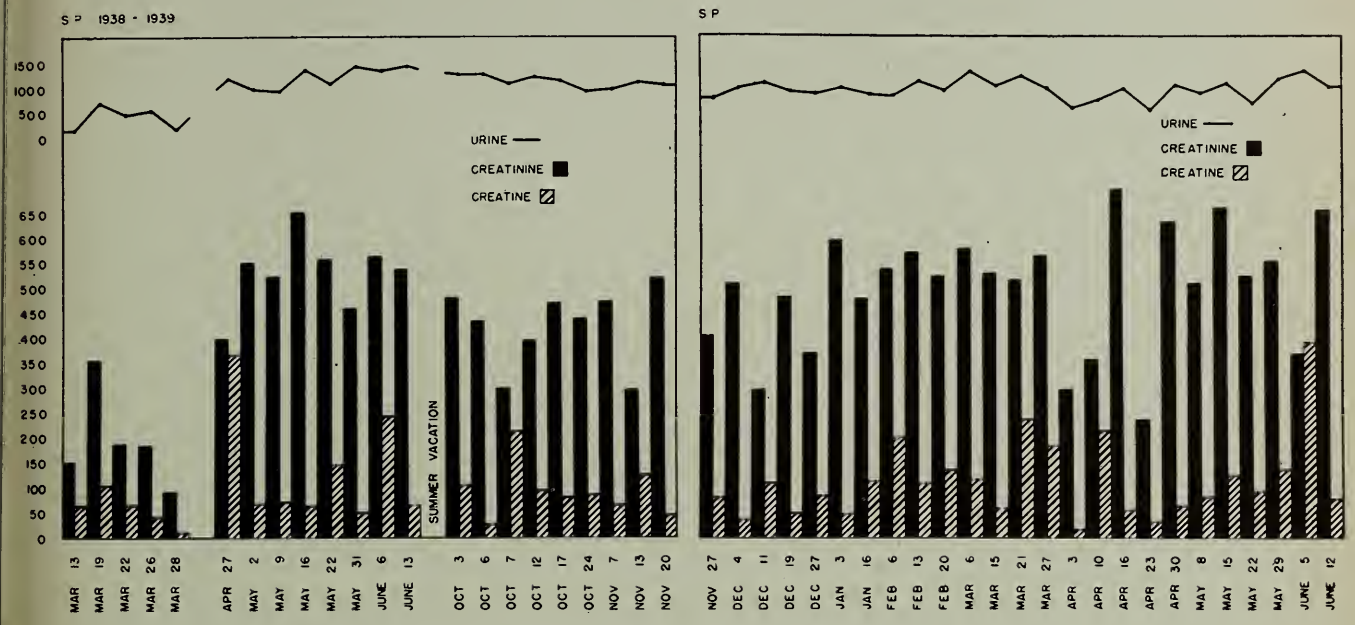


Chart 4. A decided rise in creatinin excretion is shown. This coincided with marked clinical improvement in the pseudohypertrophic dystrophy patient. He now runs, plays baseball and gets up without "climbing."

The magnesium content of the infantile type of pseudohypertrophic dystrophy muscles is nil and the moisture content is above normal. It is an easy step to give a diet containing magnesium in the hope this condition might be remedied. Cows milk contains magnesium in fair amounts, goat milk even more so. Camel milk has an even greater magnesium content though it is not available but cow and goat milk is. Thus the dystrophies were given abundant cow's milk and some were given goat's milk in the hope the magnesium might be utilized in the muscle cells.

4. Myoglobin[7] is less in the dystrophic muscles than in normal muscles. It is probably less in the infantile type of dystrophic muscles than the juvenile type. I feel this is so because of the decreased muscle tissue present in the infantile type and the increase of fibrous tissue present. I have no definite proof of this. However, the blood of dystrophy patients is about normal and there is an abundant source of materials for the formation of myoglobin in the body. It should not be necessary to add to this source other than to prevent anemia in these patients. In the infantile type of pseudohypertrophic dystrophy the muscular system is so waterlogged and infiltrated with muscle appears to have about normal myoglobin if only the muscle fibers are examined and not the fat. Thus no attempt was made to furnish myoglobin other than to keep the blood in as normal a state as possible.

5. The fact that the progression of the disease is less as the dystrophic individual matures is intriguing. Why not make these children mature as fast as possible in the hope the disease may become quiescent? I suggest that an extract of anterior pituitary glands be given. This might bring maturity faster, but even though it did not it would enhance the value of the female sex hormone. It was not used in these experiments as it might have obscured the results obtained by the female sex hormone.

### Resume of the New Regime

**1. Female sex hormone is given in an effort to favorably influence the creatin-creatinin utilization and excretion.**

**2. Choline, in the form of the hydrochloric or the chloride, is fed in an effort to favorably influence the metabolism and deposition of fat.**

**3. An attempt to make magnesium available in the body and muscular system is made by**

giving abundant quantities of cow's milk or goat's milk.

4. Anemia is prevented.

5. An extract of anterior pituitary glands might be given in an attempt to hasten the maturity of the patients, and enhance the effect of the female sex hormone.

6. In addition to the above, general setting-up exercises, physiotherapy, fresh air and sunshine is administered.

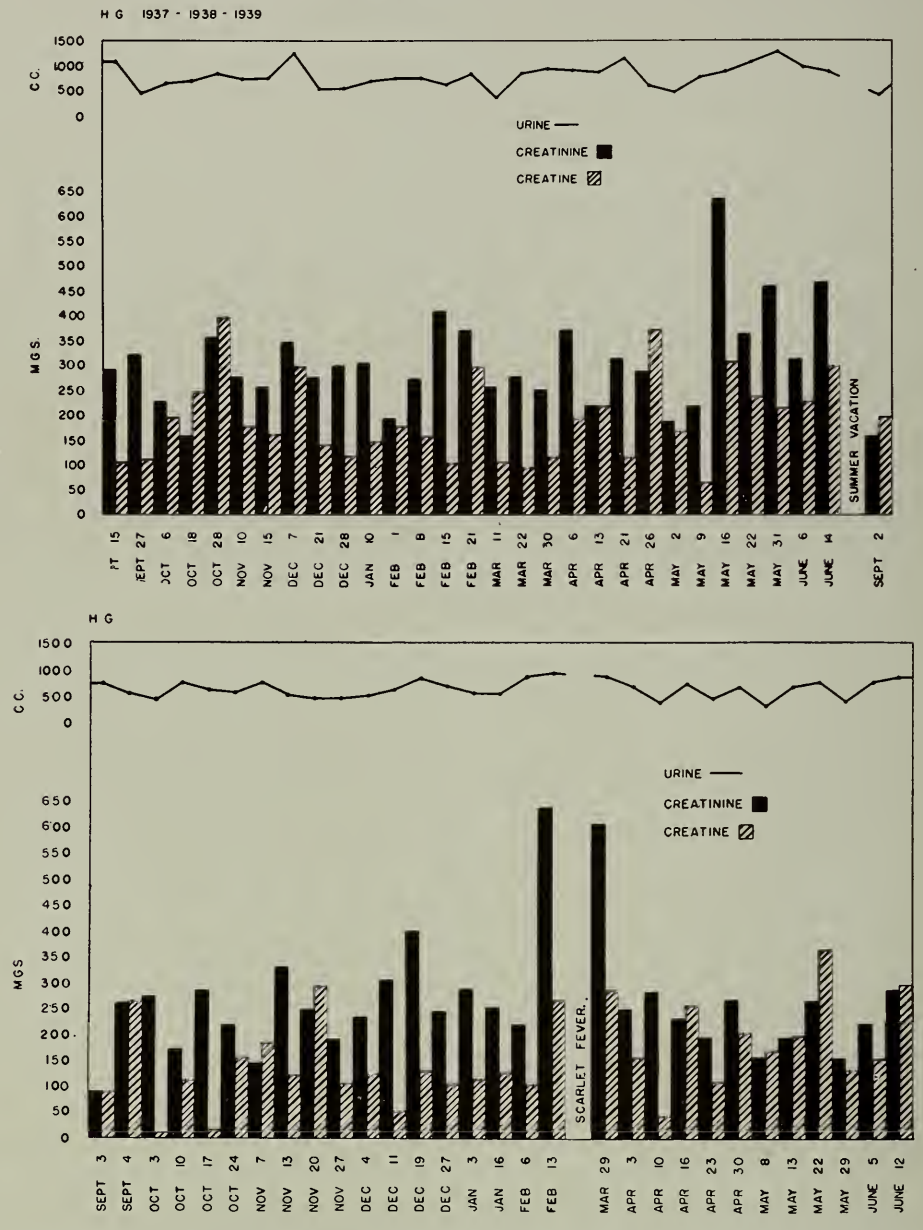


Chart 5. Creatinin output remains above normal throughout this regime with definite rises far above normal. The boy improved. He now touches toes and arises without "climbing," runs about and can be lifted by his shoulder girdles.

Contractures are overcome by gentle manipulation and stretching under an anesthetic—not surgery. Stretching a dystrophic muscular contraction is similar to bending a lead pipe—there is a rubbery resistance at first which gives way suddenly after so much correction (or bending) has been obtained. Surgical lengthening of these dystrophic muscular contractures only makes the muscle weaker. All the patients are given corsets to splint the weakened abdominal and back muscles.

## Case Reports

*Case 1.*—G. P., born October, 1927. Convulsion at one week and again while teething. Walked at eighteen months but weak and shaky. Father a drunkard. Moth-

er and one sibling living and well. One sibling with pseudohypertrophic progressive muscular dystrophy. Patient a hopeless case, used to observe effect of regime. April 20, 1937, started on 25 rat units female sex hormone daily, increased to 50 units daily five days each week on April 27.

advice, stating he was so near normal he needed no more treatment.

*Case 4.*—S. P., born October, 1930. Walked at two years with difficulty and on toes. Father dead (pneumonia). Mother and seven siblings well. February 23,

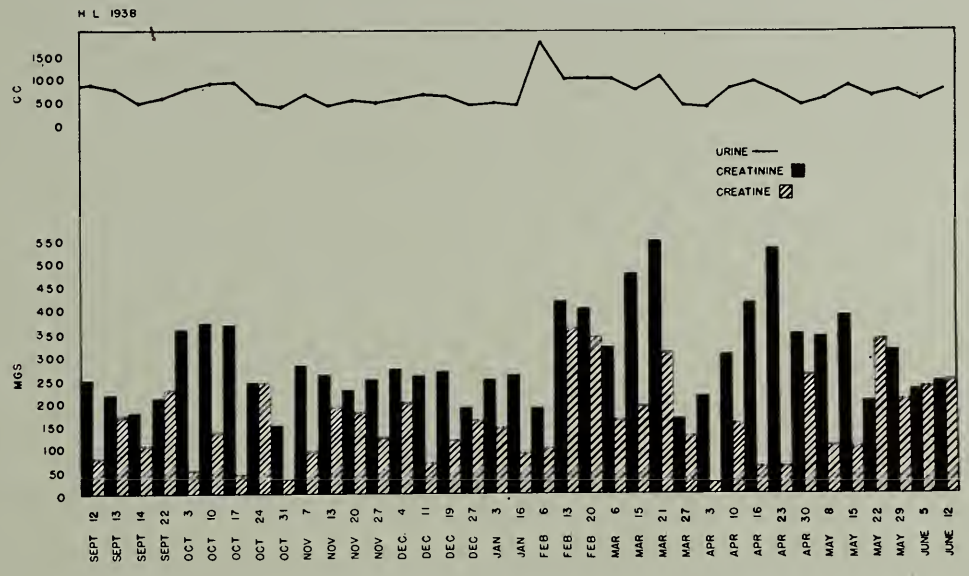


Chart 6. Creatinin excretion is definitely above normal. Clinically the boy gradually improved. He regressed slightly after the treatment was stopped for the summer months.

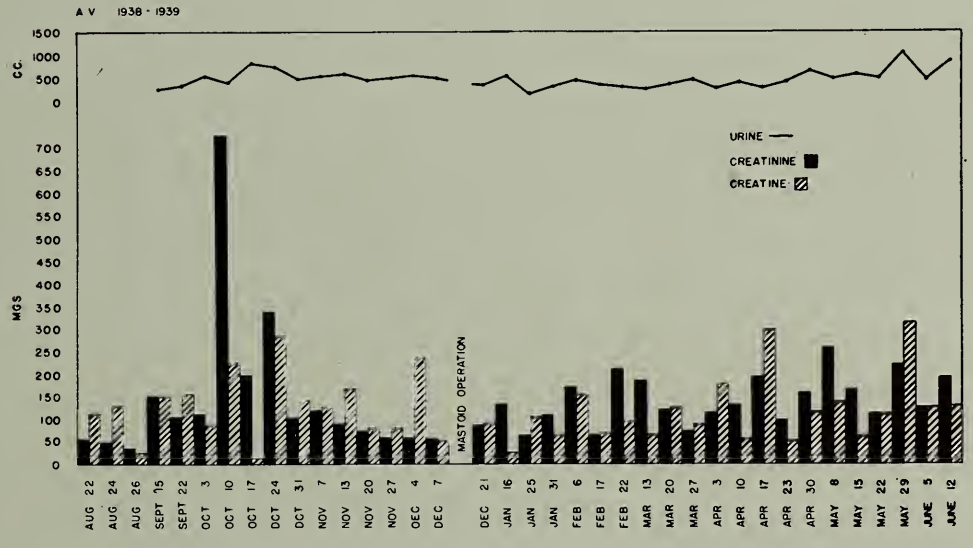


Chart 7. Urinary creatinin and creatin output of a refractive case. There is little change in the creatinin excretion. No clinical improvement was seen.

*Case 2.*—J. P., born September, 1926, brother of G. P. Difficulty walking since eighteen months. Hopeless case, used to observe effect of regime. April 20, 1937, started on 25 rate units female sex hormone daily and increased to 50 units daily five times each week, on April 27.

*Case 3.*—J. L., born May, 1931. Weakness noticed in September, 1937. Mother, father and two siblings living and well. February 3, 1938, started on choline gr. XV daily. No ill effects. February 8, choline gr. XV T.I.D. and 50 rat units female sex hormone daily five days each week, was started. Clinical improvement marked. Muscular strength so increased that parents took child home in December, 1938, against

1938, started on choline gr. XV T.I.D. and 50 rat units female sex hormone daily five times each week. Muscular strength increased enormously. Touches toes, gets up normally, can be lifted by shoulder girdles. Walks and runs but has weak abdominals and mild "Alderman's" gait.

*Case 5.*—H. G., born October, 1931. Weakness, stumbling since starting to walk. Contractures present. Mother, father and three siblings well. September 21, 1937, started on 50 rat units female sex hormone daily five times each week. January 18, 1938, tonsillectomy and adenoidectomy. June 29, 1938, treatment stopped. September 8, 1938, female sex hormone again started and choline gr. XV twice daily started. March 22, 1938,

bed ridden for three weeks with scarlet fever. Child improved definitely, contractures eliminated. Touches toes and arises without climbing. Can be lifted by shoulder girdle.

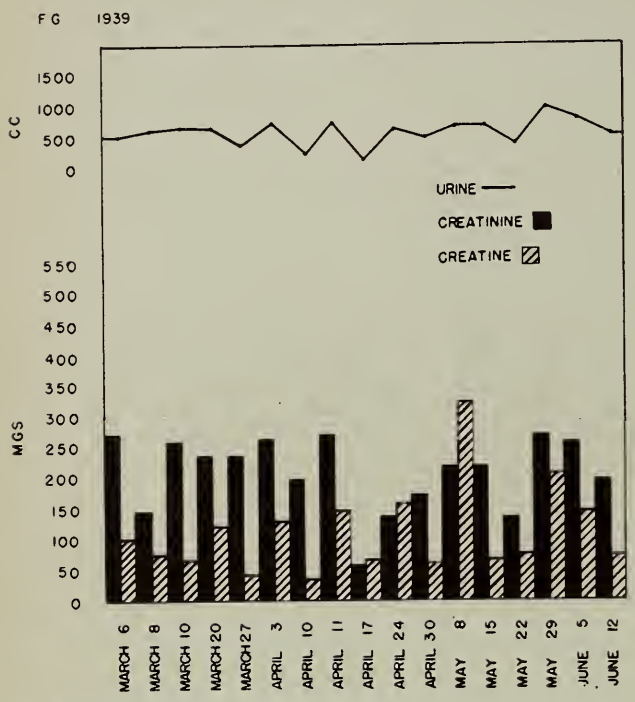


Chart 8. A young but severe case of dystrophy. The boy definitely improved clinically. The creatinin excretion was maintained about normal.

*Case 6.*—H. L., born July, 1931. Increasing weakness since starting to walk. Parents and one sibling well. Sept. 20, 1938, started on choline gr. XV T.I.D. and 50 rat units female sex hormone daily five times each week. Examination June, 1939, showed considerable improvement, runs and walks, can be lifted by shoulders, can touch toes and arise without climbing.

*Case 7.*—A. V., born September, 1930, unable to walk or stand alone since birth. Contracture legs and hips (see picture). Mentality low. Parents well. September 15, 1938, started on choline gr. XV T.I.D. and 50 rat units female sex hormone daily five times each week. Oct. 25 could walk with aid of one finger to help support him. January 29, 1939, acute otitis media bilateral. Regime discontinued. February 2, mastoidectomy. March 7, tonsillectomy and adenoidectomy. January 9, 1939, placed on regime of medication. Contractures recurred during his severe illness, patient refuses to sit or walk. Sent home for summer with crutches. Result a failure.

*Case 8.*—F. G., born Dec., 1932. Weakness since starting to walk. Mother and father well. One brother dead, suffered from muscular dystrophy. Patient on admission to hospital unable to walk up or down stairs, cried when placed on feet and yelled he could not walk. March 14, 1939, started on choline gr. XV T.I.D. and 50 rat units female sex hormone daily five days each week. Examination June, 1939, showed marked improvement clinically. Runs, walks well. Touches toes and arises without climbing. Can be lifted by shoulder girdle.

## Results

Eight patients were used in this experimental work. G. P. and J. P. were hopeless cases used only to observe the effect of the female sex hormone. Chart 1 reveals a definite increase in the creatinin excretion after treatment was started on April 20. Chart 2 reveals the creatinin excretion to be maintained at normal with occasional elevations above normal.

The next six cases were placed on the regime of treatment in an effort to improve their general condition and arrest the progression. Three of these patients had a marked increase in the muscular power, two patients had a definite improvement but not approaching normal. One patient (A. V.) had slight improvement at first then developed bilateral otitis media and mastoiditis, and end result was a total failure. The charts bear out the clinical improvements. Charts 3, 4, 5 and 6 show definite increase in the creatinin excretion. Chart 8 maintained a normal creatinin excretion. Chart 7 shows no influence on the creatinin excretion as a result of treatment.

## Comment

A new regime of treatment for pseudohypertrophic progressive muscular dystrophy is offered. The results over a three-and-a-half-year period are so encouraging the regime is presented in this preliminary report in the hope other workers will try it, and thus prove or disprove its value.

I wish to express my sincere appreciation to Dr. F. C. Kidner. Dr. F. E. Curtis and Dr. Charles W. Peabody of the orthopedic staff of Childrens Hospital of Michigan for the use of their patients in this study.

I thank the laboratory staff of the Childrens Fund of Michigan for their aid in the blood and urine analyses.

I thank Dr. Plinn F. Morse, chief of the Pathology Department of Harper Hospital, for his aid in the microscopic pathology.

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## MSMS

### MILITARY SURGEONS MEETING

The Association of Military Surgeons of the United States will meet October 29 to November 1 at the Brown Hotel, Louisville, Ky.

All members of the medical profession are invited to attend as guests and it is particularly hoped that as many members of the Medical Defense Committees as possible will come.

The session concludes with a mass review of Military Medicine and an inspection of Fort Knox.

# Sarcoma of the Urinary Bladder
## With Report of Case

By William E. Keane, M.D.
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■ SARCOMA of the urinary bladder is seldom seen by the urologist and rarely are these tumors seen early. For that reason the following case is reported with its salient features as to diagnosis and treatment together with an accompanying brief review of the literature.

Vesical sarcomas, as a rule, originate in the sub-mucous and muscular layers of the bladder wall. They are, therefore, intramural in the vast majority of cases, but generally become intravesical, polypoid, and papillomatous by invasion of the overlying mucosa, which may remain intact or ulcerate. Because of their extreme vascularity, they appear dark red to reddish blue on cystoscopy. In this connection Albarran held, that myoma and fibro-myxoma of the bladder were also malignant tumors and probably closely allied to myxosarcoma.

Myxomas are very malignant and grow with extreme invasiveness. They occur usually during the first decade of life. According to Deming 24.5 per cent of vesical neoplasms during the first years of life are myxosarcomas. Characteristically they are soft, smooth, gelatinous and lobulated. They are composed of richly vascular loose connective tissue covered by squamous epithelium. Metastases are unusual and are absent in the majority of autopied cases, but when they do occur the common sites are the sacral glands, lungs, liver and bones. Herman,[3] in describing the clinical features of this new growth says: "Vesical sarcomas are most frequent before the tenth and after the fiftieth year."

### Symptoms

Hematuria is usually intermittent, often profuse and may be the initial symptom. The dominant early clinical feature besides hematuria, is urinary obstruction associated with pain and strangury. Since these tumors are intramural they are rarely seen in what may be considered an early stage of their development and usually are far advanced as shown by the symptoms mentioned above.

### Diagnosis

Cystoscopy and cystography will show the neoplasm but no characteristic feature will distinguish it from other neoplasms especially when there is bleeding from the surface. Biopsy is essential for a precise diagnosis but it is necessary that the tissue obtained is representative of the tumor so that there will be no failure to positively identify it. Bimanual palpation of the bladder wall sometimes helps to reveal the area of infiltration.

### Case Report

V-18729, aged seventeen, white, female, was admitted to Detroit Receiving Hospital November 19, 1939. She was apparently perfectly well until about three and one-half weeks before admission.

*History.*—At that time, she began having sharp suprapubic pain at the end of urination. The pain was not very severe at first but gradually increased in intensity. Five days before admission she first noticed gross hematuria. This was bright red blood at first but the next day she passed dark blood and clots. There were no other urinary complaints. She had lost no weight and she complained of no anorexia or fatigue.

Past history was negative except for the usual childhood diseases.

Family history revealed that a half-brother died from pulmonary tuberculosis and a paternal aunt died from carcinoma of the breast.

*Physical Examination.*—Physical examination was entirely negative except for definite tenderness over the suprapubic area, and the palpation of a hard walnut sized mass in the right superior bladder wall bimanually.

*Laboratory Examination.*—Laboratory urinalysis on admission revealed specific gravity of 1.015; sugar, negative; albumin, 4 plus; microscopic: innumerable red blood cells. The Kline test was negative. Hemoglobins were 11.4 gms. Leukocytes 6,750 with 79 per cent polymorphonuclear neutrophiles and 21 per cent lymphocytes.

*Course.*—The day following admission she was cystoscoped and the findings were as follows: Grossly bloody urine returned after the passage of the scope. Bladder capacity was 200 cc. with slight discomfort. On the right superior wall of the bladder well away from the right ureter was a growth 2.5 cms. in diameter protruding into the bladder cavity. It was not cauliflower in type but appeared like a cervix protruding into the bladder. The mucosal covering of the mass was normal in appearance except for two small hemoglobic areas from which the recent bleeding had occurred. The remainder of the bladder was entirely normal in appearance. A biopsy of the tumor was taken and the smooth surface bled readily. The pathologic report of the biopsy by Dr. O. A. Brines revealed that the amount of tissue was too small for diagnosis. A cystogram was made at the time of the cystoscopy and showed no infiltrative lesion of the bladder wall. X-ray examination of the chest was reported as entirely negative.

Because of the negative first biopsy it was thought advisable to obtain the second specimen by means of the resectoscope. A good representative section was taken after which the area was fulgerized to control the bleeding. The biopsy section was composed of slender, spindle shaped neoplastic cells, quite regular in size, with an orderly arrangement and a very loose edematous stroma. The biopsy diagnosis was fibroma or myxofibroma with added statement that sarcoma could not be ruled out. No muscularis was included in the biopsy.

Discussion at the Tumor Conference developed along the line of whether the lesion should be treated palliatively with fulguration to control bleeding or whether the portion of bladder wall occupied by the tumor should be resected. The latter recommendation was followed.

*Pathologic Report.*—The microscopic sections represented a neoplasm composed of very slender long cells possessing abundant cytoplasm which stained deeply with eosin. There was intercellular stroma, comparatively acellular, slightly basophilic, quite abundant in places, which was described as myxomatous. This stroma was quite richly vascularized. The neoplastic cells exhibited a tendency to form bundles. There was some irregularity in nuclear size and staining intensity with the formation of a number of giant hyperchromatic nuclei. The muscularis of the bladder was being extensively invaded, destroyed and replaced by neoplastic tissue. The pathologic diagnosis was leiomyosarcoma of the bladder wall.

*Further Course.*—The bleeding ceased and the remaining evidence was only the small fibrous area which could still be palpated bimanually in the bladder wall. Because the location was favorable for open operation and the questionable microscopic diagnosis of the tumor, it was deemed advisable to resect the mass by open operation rather than attack it by any other method. The bladder was opened and with good exposure the small intramural growth was easily excised. The tumor seemed to be well localized to the muscular layer of the bladder wall. The bladder wall was tightly sutured, a drain placed in the pre-vesical space and an indwelling urethral catheter inserted.

The postoperative course was uneventful and the wound healed readily by first intention. She was discharged from the hospital on the sixteenth postoperative day and forty-two days after her admission.

Cystoscopy one month postoperative revealed a bladder interior of normal capacity and contour. The cleanly healed scar was seen with no evidence of recurrence of the tumor. Another check cystoscopy one month later revealed a slight nodularity about the scar without breaking the continuity of the mucosa. It was felt that this was very suggestive of an early local recurrence of the tumor. Because of the apparent invasion of the tumor beyond the excised area and in spite of the girl's age, with possibility of resultant sterilization, it was thought advisable to give her an intensive course of deep x-ray therapy. The first series of deep x-ray therapy was begun on Febrary 27, 1940, and consisted of nineteen consecutive daily treatments, totaling 3,800 roentgen units, alternating between anterior pelvis, including both groins and posterior pelvis. A check cystoscopy on March 21, 1940, one month after the first course of x-ray revealed a decrease in the nodularity noted on the previous examination. The next cystoscopy was on April 21, 1940, at which time no evidence of the afore-mentioned nodularity about the scar was noted. The second series of deep x-ray therapy consisted of 12 treatments, totaling 2,400 roentgen units, given from May 13, 1940, to May 25, 1940. Cystoscopy one month later revealed no evidence of reformation of the tumor. The third and last series of therapy consisted of ten treatments, totaling 2,000 roentgen units, given over a ten day period beginning August 19, 1940. With the completion of this series she had received a total of 8,200 roentgen units, given in three series, during a six months period. The most recent cystoscopy ten months after resection of the bladder tumor showed no evidence of local recurrence and x-ray of the pelvis and chest are likewise negative.

Acknowledgment and thanks are given to Dr. Donald J. Jaffar, Junior Attending Urologist, and Dr. Carl Anneberg, Resident in Urology, Detroit Receiving Hospital, for their assistance in presenting this case.

## MSMS

Whisperings of a "strike" in the course of physical examinations for the Selective Service Boards are heard in one section of a highly populated county in Indiana. It seems that the medical examiners, who are doing their work gratis, expect the paid employes of the Board to do a bit of the clerical work, thus minimizing the task of the *unpaid* physicians. The *paid* employes have rebelled, stating that this is the job of the doctors. Our recommendation is that when such an occasion arises the medical men walk off the job and remain away until these suddenly-officious persons come to their senses. It's queer how a city, government or state job goes to one's head!—*The Journal of the Indiana State Medical Association,* August, 1941.

# President's Page

## To The Future

WITH gratitude, but with a sense of humility I assume the Presidency of the Michigan State Medical Society, with thanks to our members for this high honor. I sincerely request a continuation of the generous help, interest and teamwork of the membership during my tenure of office.

Particularly from my committee workers, I request their sustained activity and effort in medical and civic affairs. The influence and prestige of the Michigan State Medical Society rest mainly on the work of its committee personnel.

Finally, I urge all members to gather into our ranks every eligible doctor of medicine, for his good and for the good of the Society. Particularly, all interns and hospital residents should be invited by active members to become affiliated, now, with the Michigan State Medical Society. In those counties having medical schools, the senior students should be urged by their professors and by the county medical society officers to attend the society meetings, both county and state. What Medicine is to be tomorrow depends upon the moulding of the young medical mind of today.

Henry R Carstens

President, Michigan State Medical Society.

# EDITORIAL

## THE BEST YET

■ The Seventy-sixth Annual Convention has passed into the records. The almost universal opinion expressed is that it was run more smoothly than any other recent convention. Splendid arrangements for housing by the Pantlind Hotel, the coöperative spirit of the people of Grand Rapids, the enthusiasm and energy of the exhibitors, and the lavish entertainment program formed a perfect background for the unexcelled array of scientific papers.

Every speaker appeared as scheduled and not even the usual amount of dissatisfaction was heard.

The Section meetings were so well attended that in some of them the available space was filled to capacity. Special comment was received on the value to the general practitioner of the papers which were given in the Sections.

The Discussion Conferences, an innovation of 1941, were enthusiastically enjoyed and provided a splendid opportunity to correlate the presentations from the General Assembly.

The scientific exhibits included some exceptional displays for visual education.

The attendance was eminently satisfactory, although the ultimate hope to have every practicing member of the Michigan State Medical Society register at the state convention was not reached.

Comments on the organization activities and Michigan Medical Service will be found elsewhere and it will be noted that they are proportionately satisfactory to the scientific part of the meeting.

MSMS

## MICHIGAN MEDICAL SERVICE

■ At a special meeting of the Delegates and some interested members, held September 15, 1941, the night before the official meeting of the House of Delegates, several hours were spent in receiving reports and discussing the various phases of the Michigan Medical Service.

The meeting which opened with a series of discordances ended with general satisfaction and the acknowledgment that despite some apparent inequalities the program, with a few minor changes, was desirable and its continuance to be favored. This same view was reflected the next day in official meetings of the House of Delegates.

Although a number of resolutions were introduced, only three were accepted by the House and they were referred to the meeting of the members of the Corporation. One of these asked that some investigation and experimentation be made in issuing and selling limited liability policies. Another resolution which advocated the lowering of income limits was discussed in the meeting of the Corporation with no final action being taken. One interesting sidelight was the clarification of the oft-raised question as to who had determined the existing income levels. It was finally shown that these limits had been set in 1939 by the House of Delegates without recorded opposition.

The Board of Directors of the Michigan Medical Service met during the MSMS Convention and steps were taken to begin the investigation and experimentation in the matter of limited liability certificates. At the same time authorization to contract with the General Motors Corporation and its employes toward the issuance of surgical contracts to the employes and their families was voted by the Board. This will provide between 160,000 and 170,000 new but well-seasoned subscribers to the plan. With General Motors plants in a number of cities in Michigan the benefits will be greatly extended and a greater degree of stability attained for Michigan Medical Service.

MSMS

## AN ERROR CORRECTED

■ Information furnished by Wilfrid Haughey of Battle Creek revealed an error in the September editorial on President Henry R. Carstens. It was stated therein that Dr. Carstens was the first son to follow in a father's footsteps as president of the Michigan State Medical Society. Not only is our present incumbent not the first

in Michigan to achieve this distinct honor, but he is the fourth.

**Perhaps this record is unique in medical history of the United States! David Inglis, president of the society in 1905, followed his father, Richard Inglis, of Detroit who had been president in 1869. The following year, in 1906, Charles B. Stockwell became president, his father having been Cyrus M. Stockwell of Port Huron, the first president of the reorganized state society, in 1866. Leartus Connor of Detroit was president in 1901 and in 1923 his son, Guy L. Conner, succeeded in his footsteps.**

Other interesting information received from Dr. Haughey disclosed that Henry O. Hitchcock of Kalamazoo was president in 1871 and his son, Charles W. Hitchcock, became secretary from 1890 to 1895. Jerome K. Jerome of Saginaw was president in 1867 and was again elected president in 1881. Andrew P. Biddle of Detroit is the only president who ever served two consecutive terms.

The profession is indeed indebted to these families of medical leaders.

## MSMS

### THE NEW DISEASE

American physicians must prepare to cope with a new disease. It is becoming generally prevalent and may reach epidemic proportions and severity. It is contagious, and attacks all without discrimination, including those who fill the ranks of the trades and the professions.

By virtue of their training, their ethics, the nature and the demands of their profession, doctors are especially susceptible to the contagion. Until it is better named, the new disease can be called "War Fever." The future effectiveness of American medicine and the future status of the American doctor will be determined by the extent to which individual physicians are successful in immunizing themselves against the hysteria which is a symptom of and which always accompanies the disease.

The world is at war. One hundred and thirty million Americans are very much a part of this world. It is a wholly new kind of war. In times past, material advantage and territorial gains provided the incentive for wars of aggression. This is a war of ideological conquest. Material advantages and territorial gains are merely incidental to the larger purpose. It is an all-out warfare, spending lives and treasure on a scale never before contemplated or even imagined by man.

In the present situation there are too many uncertainties to enable either the wisest or the best informed reasonably to predict the extent to which it may be necessary to sacrifice the lives and material resources of this country in order to win this war. It is a known fact—and it should be faced—that we are in the process of mobilizing all of our energies and utilizing all of our resources for the accomplishment of this purpose.

It is almost needless to say that no group will be called upon to make a greater contribution than will be expected from the medical profession. It is needless to say that this contribution will be gladly, cheerfully made by American physicians. American doctors do not expect any special credit for the important service they are rendering or will be called upon to render. Their tradition, their training and experience make this attitude inevitable. Many are already enlisted for the duration. The rest will be ready when called.

However, the greatest national danger lies in the possibility of these doctors becoming victims of the "new disease." On them rests a new and most vital responsibility. It is of the utmost importance that these physicians ever keep in mind that the war itself is one of ideologies; that our first obligation and most difficult task is to preserve the Priceless Heritage of the American People that has set them over and above and apart from all the other people in the world. It is desirable to consider carrying the "four freedoms" to all the people in the world. But—it is essential that we maintain our own independence and freedom of action—"for what shall it profit a man if he shall gain the whole world and lose his own soul?" It is our task now to "hold fast that which is good."

Tomorrow will come the peace. While we unselfishly and unlimitedly serve, we should make sure that stifling control of bureaucracy is not permanently established. We should take steps to insure the preservation of the sacred doctor-and-patient relationship, the independence of the physicians, the continue progress of American medicine and the safeguarding of the public interest.

Medicine's planning and administrative agency in these fields is the *National Physicians' Committee for the Extension of Medical Service,* Pittsfield Building, Chicago, Illinois. It has demonstrated both its reliability and its effectiveness. In these times of increasing stress it should have the allegiance and financial support of every patriotic practicing physician. If your county association has not appointed an official committee to coöperate with N.P.C., it should do so at the next regular meeting.

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### PAY-YOUR-DOCTOR WEEK

Fourth annual "Pay-Your-Doctor Week" will be observed this year, November 2 to 8.

Inaugurated in 1938 by California Bank in Los Angeles, observation of "Pay-Your-Doctor Week" swiftly spread to scores of cities throughout the country and last year virtually achieved nation-wide recognition.

Primary purpose of "Pay-Your-Doctor Week" is to pay tribute to the members of the healing profession who quietly but relentlessly continue the battle against disease and sickness, particularly at this time when much of the world is engaged in destroying rather than preserving life.

Recognized also is the fairly widespread tendency to "let the doctor wait" until all other bills have been paid.

Sponsors of "Pay-Your-Doctor Week" point out that the plight of the country doctor who is often paid with farm products or a share in next year's crop has been widely publicized in recent years while little has been said about the city doctor whose reward for services rendered all too frequently consists mainly of long hours of practice and vague promises of payment sometime in the future.

Because "Pay-Your-Doctor Week" was originated and is sponsored by the banking profession, the question of medical ethics is not involved.

Banks sponsoring the week throughout the country call attention to the fact that funds are available to lend for the purpose of paying doctor bills.

# YOU AND YOUR BUSINESS

## THANKS

The Council of the Michigan State Medical Society has placed on its minutes a vote of thanks to all who contributed to the extraordinary success of the State Society's 1941 Annual Meeting. The Council is grateful to the guest-essayists, their "ubiquitous hosts," the officers of the Society, the chairmen and secretaries of the General Assemblies and of the Sections, the Discussion Conference Leaders, the Monitors of the Sections and Discussion Conferences, the efficient Press Relations Committee, the Hospitality Committee, the Grand Rapids Committee on Arrangements, the Scientific and Technical Exhibitors, the Radio Stations, the newspapers for many columns, the Grand Rapids Convention Bureau, our friends who sponsored lectures at the General Assemblies, the management of the Kent Country Club, the Kent County Medical Society, and all who by their active help made the meeting such an enjoyable and instructive affair; not the least, thanks are due to all the members who by the hundreds left their busy practices in all parts of the state to visit Grand Rapids for the 76th Convention of the Michigan State Medical Society.

Ladies and Gentlemen, thank you again!

MSMS

## PHYSICIANS MAY SELECT HOSPITALS FOR AFFLICTED CHILDREN

Section Six of the Afflicted Child Law (Act 283 of the Public Acts of 1939) specifically states:

> "The Commission may enter an order, directing that such child be conveyed . . . to a hospital in the State selected by the attending physician, and which has been approved and designated by the Commission for the care of Afflicted Children."

This applies, at the present time, only to *Afflicted* Children.

If any attempt is made to take this prerogative away from a physician, he should cite the above section of the Afflicted Child Law as his authority and insist upon his rights, provided the hospital of his choice is approved by the Commission and is in his locality.

## MEDICINE OUT OF THE AIR

At the 76th Annual Meeting of the Michigan State Medical Society, radio played an important part. Radio Stations WOOD and WLAV of Grand Rapids coöperated wholeheartedly by giving freely of their time and facilities. The following talks on matters of scientific and general interest were presented during the Convention week: "The Functions of Medicine and the Michigan State Medical Society," by Wm. A. Hyland, M.D., Grand Rapids, September 15; "What the Doctor's Wife Means to the Community," by R. C. Jamieson, M.D., Detroit, September 16; "The Value of Postgraduate Medicine to the Public," by H. H. Cummings, M.D., Ann Arbor, September 17; "The Family Doctor," by W. H. Huron, M.D., Iron Mountain, September 18; and "Michigan Medical Service," by Henry R. Carstens, M.D., Detroit, September 19.

MSMS

## MEMBERSHIP MARCHES UPWARD

The membership of the Michigan State Medical Society, as of September 12, 1941, stood at 4,432 members, the greatest total in the history of the Society for that date.

The record for the past six years stands as follows:

| | 1940 | 1939 | 1938 | 1937 | 1936 | 1935 |
|---|---|---|---|---|---|---|
| July | 4,401 | 4,255 | 3,958 | 3,757 | 3,457 | 3,410 |
| December 31 | 4,527 | 4,425 | 4,205 | 3,963 | 3,725 | 3,653 |

MSMS

## PLACEMENT BUREAU

The Placement Bureau of the Michigan State Medical Society has been working quietly during the past three years but has been doing a constructive job of finding locations for physicians as well as successfully interesting doctors in locating where more medical service is needed. No fanfare of trumpets has announced the Bureau's progress and successes, here and there. Only the communities which have been served and the doctors who have found a satisfactory locale know and appreciate the Placement Bureau's efforts. It has solved in certain instances and it continues its attempts to find a practical answer to the problem of distribution of medical service in this State.

# MICHIGAN'S DEPARTMENT OF HEALTH

HENRY A. MOYER, M.D., Commissioner, Lansing, Michigan

## MICHIGAN RECORD BETTER THAN NATION

Michigan's death rate was lower in 1940 than the national average and the birth rate was higher, according to provisional figures of the U. S. Public Health Service.

The 1940 death rate for the state was 9.9 deaths per 1,000 population, compared with 10.5 nationally. The birth rate comparison is 18.8 for Michigan and 17.6 for the nation.

Among the five east north central states, Michigan led the others in favorable rates. Wisconsin was second low in death rate with 10.0 and the other states had rates as follows: Illinois 11.2, Indiana 11.3, Ohio 11.3. Wisconsin also was next to Michigan in birth rates with a rate of 17.3. Other rates were: Indiana 16.9, Ohio 16.3, Illinois 15.6.

Both the low death rate and the high birth rate for 1940 are in part due to Michigan's young population. Whole families are still moving to Michigan and young men and women still are coming into the state for the same reason—opportunities for jobs.

As Michigan's population grows older, our death rate will go up and our birth rate will go down, but these are long-time effects and probably will not be apparent for years to come. As for the immediate future, we may see a higher birth rate and a slightly lower death rate in prospect for 1941.

## POLIO CASES BELOW AVERAGE

Infantile paralysis cases this year are under average figures. August cases reported to the Michigan Department of Health totaled 59, compared with a five-year average of 103. In last year's record epidemic, the August total was 304 and September cases totaled 508.

In August, no county except Wayne reported as many as five cases of polio whereas last year 18 counties reported five or more cases. Wayne had 32 cases this year in August and of these 29 were in Detroit. Only one case of polio was reported from the Upper Peninsula in August. Last year the Upper Peninsula was severely affected. With only six per cent of the state's population, the Upper Peninsula in 1940 had 30 per cent of the polio cases.

———MSMS———

## CANCER PROGRAM EXPANDED

Dr. F. L. Rector, for eleven years midwestern field representative of the American Society for the Control of Cancer, has been named cancer consultant for the Department, to work with both lay and medical groups. The appointment and working arrangements have the approval of the State Society's Cancer Committee, headed by Dr. Wm. A. Hyland of Grand Rapids. In


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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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his lay activities, Dr. Rector will be assisted by Miss Grace Townsend, who has a background of teaching and cancer research. The two were to join the Department staff September 15.

Dr. Rector is known to the medical and health professions of Michigan because of his field work with the American Society for the Control of Cancer. He made a survey of facilities for treating cancer in the state in 1935 and the results were published in the November, 1935, issue of THE JOURNAL of the Michigan State Medical Society. He has spoken in many of the cities of Michigan before medical societies and hospital staffs, and before college, church, women's and other lay groups.

"Michigan is unique among the states for its joint program of cancer education which the medical profession and the State Health Department are sponsoring," Dr. Rector said. "We shall try to bring its benefits to every adult in the state."

Dr. and Mrs. Rector live in Evanston, Illinois. He was graduated at Oklahoma Agricultural and Mechanical College and received his medical degree from George Washington University at Washington.

Miss Townsend has done research and has taught at the University of Chicago where she took her doctorate in zoology and biochemistry. She has done research at the Marine Biological Laboratory at Woods Hole, Mass., on the chemistry of cell division and of sensitivity of cells to the x-ray. Other institutions where she has taught include Joliet high school and junior college, Ohio State University and Miami University. Her work with the Department will be with lay groups, including the Women's Field Army of the national cancer society.

———MSMS———

## DIPHTHERIA OUTBREAKS IN AUGUST

Two outbreaks of diphtheria which threatened to become old-style epidemics were brought under control in August. Both were in Mexican migrant labor families in sugar beet areas. Three deaths occurred.

At Blissfield, in Lenawee county, a colony of 246 persons was placed under quarantine after throat cultures showed several carriers. The first cases were reported by Dr. E. V. Tubbs, Blissfield village and township health officer. An epidemiologist and the mobile laboratory of the State Health Department were sent to the colony, and throat swabs were taken of every man, woman and each of the more than 100 children in the colony. Dr. T. M. Koppa, of the Bureau of Epidemiology, went to Blissfield to assist in control measures.

Twelve cases in children were reported, including two deaths. Eighteen persons were found to be carriers. Antitoxin was used freely, and toxoid was given to the children. Dr. Tubbs arranged for toxoid treatment of all children in the village of Blissfield.

The other outbreak occurred in Saginaw county. One death occurred, a baby. Four families were isolated in the contagious unit of the Saginaw County Hospital by Dr. V. K. Volk, Saginaw county health officer.

———MSMS———

## NEW SANATORIUM CONSULTANT

Consultation services for all tuberculosis sanatoria receiving state aid are now being offered by the Michigan Department of Health. Dr. Anthony D. Calomeni, since 1938 physician-in-charge of the tuberculosis unit of the Saginaw County Public Hospital, has been appointed consultant. A schedule is now being worked out to bring these new consultation services of the Bureau of Tuberculosis Control to both sanatoria and health departments.

Prior to his work at Saginaw, Dr. Calomeni served as resident physician at the William H. Maybury Sanatorium in Northville. He is a member of the Saginaw County Medical Society, the Michigan Trudeau and the American Trudeau Societies, the Michigan Tuberculosis Association and the National Tuberculosis Association.

# IN MEMORIAM

**Harry G. Bevington** of Detroit was born in the year 1877 and was graduated from Cleveland Pulte Medical College in 1898. Following his internship at Grace Hospital, Detroit, he entered general practice on the east side of Detroit. Later he established an office in the David Whitney Building when it was completed in 1915, which he continuously occupied until a few years ago, when his health compelled him to restrict his work. He died on July 15, 1941.

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**A. Milton Campbell** of Lansing was born in Forest, Ontario on October 4, 1868, and was graduated from the Detroit College of Medicine and Surgery in 1898. He began his practice of medicine in Haslett, later moving to Lansing where he served the people until January 1, 1941, when he gave up his office because of ill health. Doctor Campbell, an intimate friend of many athletes, was team physician for a number of years at Central High School. He was a familiar figure on the side lines at all local games and made many trips with the football teams. He died August 17, 1941, after a long illness.

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**George A. Seybold** of Jackson was born in 1881 and was graduated from the University of Michigan Medical School in 1904. He was past president of the Jackson County Medical Society, surgeon for the Michigan Central Railroad and a fellow in the American College of Surgery of the American Medical Association. Doctor Seybold served as a captain in the Medical Corps in the World War. He died on September 6, 1941.

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**William H. Riley** of Battle Creek was born in Mattoax, Va., Feb. 5, 1860 and was graduated from the University of Michigan Medical School in 1886. He joined the Battle Creek Sanitarium staff the year he graduated and was sent to its branch hospital at Boulder, Colorado, where he served as director for eight years. Doctor Riley won recognition as a neurological diagnostician. He made many valuable contributions to the study of neurology, the most important of which was his invention of the ataxiagraph, used in studying incoördination of the movement of the body. He served as head of the neurology department of the Battle Creek Sanitarium from 1902 until his retirement on March 27, 1938. He was elected to Emeritus Membership of the Michigan State Medical Society in 1939. Dr. Riley died on Aug. 24, 1941.

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**John A. Schram** of St. Joseph was born in Chicago, in 1903 and was graduated from the University of Indiana in 1931. He served his internship in Methodist hospital at Indianapolis. Later he headed the Rockefeller Foundation hospital in Ohio for a year before establishing his practice in St. Joseph. He died September 9, 1941.


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# ✶ COUNTY AND PERSONAL ACTIVITIES ✶

*One of the most fertile fields* of malpractice litigation is the allegation on the part of a patient that in reaching his diagnosis a physician did not use all necessary and obtainable diagnostic aids.—Humphreys Springstun, of the Detroit Bar. Doctors and Juries. P. Blakiston's Son and Co., Inc. 1935.

* * *

*The American Association of Industrial Physicians and Surgeons* will hold its second annual meeting, November 5 and 6, at Chicago Tower, Chicago, Illinois. The interesting program may be obtained by writing C. O. Sappington, M.D., 540 North Michigan Avenue, Chicago.

* * *

The Tumor Clinic of the J. D. Munson Hospital, Traverse City, was forced to change from monthly to weekly meetings because of increased interest by both physicians and patients. The present plan consists of a Thursday noonday luncheon followed by presentation and discussion of patients.

* * *

*"Roentgen Therapy for Rheumatoid Arthritis of the Spine"* by C. J. Smyth, M.D. R. H. Freyberg, M.D., and Isadore Lampe, M.D., of Ann Arbor appeared in the A.M.A. *Journal* of Sept. 6.

*"Perpetuation of Error in Obstetrics and Gynecology"* by Norman F. Miller, M.D., Ann Arbor, appeared in J.A.M.A., Sept. 13, 1941.

* * *

*Toledo University* invites all members of the Michigan State Medical Society to its annual Medical Postgraduate Course, Friday, October 31, University Building, Toledo, Ohio. This year's program will be a round-table discussion led by McKeen Cattell, M.D. Harry Gold, M.D., and Eugene F. DuBois, M.D., members of the Department of Physiology of Cornell University Medical College.

* * *

*The Athletic Accident Benefit Plan* of the Michigan High School Athletic Association published its first Annual Report for the 1940-41 school year on August 20. Nearly half of the high schools in the state (328) participated in the Benefit Plan, registering 9,975 students for protection under the schedule of benefits. A total of $10,550.20 was paid to member schools for 903 allowed injury benefits. For copy of this interesting report, write C. E. Forsythe, Secretary, Athletic Accident Benefit Plan, The Capitol, Lansing, Michigan.

* * *

*The American Association for the Study of Goiter* again offers the Van Meter Prize Award of Three Hundred Dollars and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The Award will be made at the annual meeting of the Association which will be held at Atlanta, Georgia, June 1, 2, and 3.

The competing essays may cover either clinical or research investigations; should not exceed three thousand words in length; must be presented in English; and a typewritten, double spaced copy sent to the Secretary, T. C. Davison, M.D., 478 Peachtree Street, Atlanta, Georgia, not later than April 1.


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✣

Sanitarium Hotel Accommodations

### Large Class Enters College of Medicine

A special "Welcome Day" for the largest class of entering students in seven years at the College of Medicine of Wayne University was held September 17 at the Gratiot-St. Antoine center.

Because of defense needs, special arrangements have been made to accommodate 10 more medical students than customarily are admitted each September. The request for the increased quota was transmitted last summer from the government through the Association of American Medical Colleges.

The program for the medical group was in charge of the College's Student Council, and had been planned by the Council president, James Doty, 2417 Crane. Following a 1:00 p.m. auditorium program, the medical group toured college buildings and visited Receiving and St. Mary's hospitals and the Board of Health laboratories.

* * *

### Arthur Humphrey, M.D., Battle Creek, 1941 M.S.M.S. Golf Champion

The 1941 Golf Tournament of the Michigan State Medical Society which was held over the beautiful and sporty Kent Country Club, Grand Rapids, on September 15, was won by Arthur Humphrey, M.D., of Battle Creek with a low of 83. Winner of the Championship Flight and second low of the field was George Slagle, M.D., also of Battle Creek. Doctor Humphrey was awarded the Penberthy Trophy for one year as well as the President's Trophy, the latter donated by P. R. Urmston, M.D., Bay City, president of the Michigan State Medical Society.

Harry F. Dibble, M.D., Detroit, copped the President-Elect's Prize donated by Henry R. Carstens, M.D., Detroit, with the low net score of the day.

C. F. Vale, M.D., Detroit, was the lucky winner of a Bulova wrist watch in the Kicker's Handicap. The prize was donated by Bill Mennen.

Other winners were R. J. Paalman, M.D., Grand Rapids, low net in the Championship Flight; A. M. Putra, M.D., Detroit, low gross in the First Flight; O. B. McGillicuddy, M.D., Lansing, low net in the First Flight; R. M. McKean, M.D., Detroit, low gross in the Second Flight; L. J. Morand, M.D., Detroit, low net in the Second Flight; A. J. Baker, M.D., Grand Rapids, low gross in the Third Flight; and Henry A. Luce, M.D., Detroit, low net in the Third Flight.

Don M. Howell, M.D., Alma, won the Maturity Event limited to members 50 years of age and over by shooting an 89. He took home the J. H. Dempster Trophy for one year's possession and the Treasurer's Prize donated by Wm. A. Hyland, M.D., of Grand Rapids. Robert C. Jamieson, M.D., Detroit, and R. H. Baribeau, M.D., Battle Creek, were runners up in the Maturity Event.

Second and Third Prizes in the Kicker's Handicap were won by A. E. Catherwood, M.D., Detroit and A. R. Dickson, M.D., Battle Creek.

M. J. Holdsworth, M.D., Grand Rapids, supervised arrangements for the tournament.

Additional prize donors were: A. S. Brunk, M.D., Chairman of The Council; O. D. Stryker, M.D., Speaker of the House of Delegates; L. Fernald Foster, M.D., Secretary; Roy H. Holmes, M.D., Editor of THE JOURNAL; H. H. Cummings, M.D., Vice Chairman of The Council; Wm. E. Barstow, M.D., Councilor of the Eighth District; W. H. Huron, M.D., Councilor of the Thirteenth District; A. H. Miller, M.D., Councilor of the Twelfth District; Vernor M. Moore, M.D., Councilor of the Fifth District; Wilfrid Haughey, M.D., Councilor of the Third Councilor District; Roy C. Perkins, M.D., Councilor of the Tenth Councilor District; E. F. Sladek, M.D., Councilor of the Ninth Councilor District; and Bill Burns, Executive Secretary.

Main Entrance

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## COUNTY SOCIETY NEWS

*The Grand Traverse Leelanau-Benzie County Medical Society* held its annual Summer Clinic at Munson Hospital, Traverse City, July 24-25, with an attendance of fifty physicians.

Frederick A. Coller, M.D., of Ann Arbor and Grover C. Penberthy, M.D., of Detroit, conducted operative clinics during both morning sessions. Both afternoons were devoted to lectures:

Frederick A. Coller, M.D., Ann Arbor: "War Surgery."

Cyrus C. Sturgis, M.D., Ann Arbor: "The Purpuric Anemias."

Carl E. Badgley, M.D., Ann Arbor: "The Sulfonamides in Compound Fractures."

Edgar A. Kahn, M.D., Ann Arbor: "Some Significant Neurological Signs in Everyday Medical Practice."

William G. Gordon, M.D., Ann Arbor: "The Use of Estrogenic Drugs in the Male."

Grover C. Penberthy, M.D., Detroit: "The Use of the Sulfonamides in Acute Osteomyelitis."

Issac A. Abt, M.D., Chicago: "Congenital Megacolon."

Following the Thursday evening banquet, Dr. Penberthy showed a movie on the "Treatment of Burns," and C. E. Boys, M.D., of Kalamazoo showed a movie on "Jaguar Hunting in Brazil."

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*Washtenaw County:* S. W. Donaldson, M.D., Ann Arbor, addressed the Society on "The Physician's Civil Liability."

Following a historical introduction, the speaker discussed the physician's rights, privileges, responsibilities, and liabilities. Within this scope he defined and discussed the contract between patient and physician, the responsibility of both parties under the contract, and the mode of termination of this contract.

In a breach of this contract by the physician, a malpractice suit may be instituted. This suit is an action of tort or a civil wrong for which local redress can be rendered by the awarding of many damages and in which the law does not provide punitive action such as a fine or imprisonment against the offender.

The discussion of malpractice suits was further amplified by the consideration of a status of limitations (in Michigan it is two years), malpractice defense, and malpractice prophylaxis.

In a survey of 35,000 suits the following reasons in order of importance constituting 90 per cent of causes were given:

1. Inopportune remarks by subsequent attending physician.
2. Personal enmity and jealousy between members of the profession.
3. Counter suits as a defense against the suit brought by doctor for the purpose of collecting his fee.
4. Failure to use the x-ray with the diagnosis, and reduction of a fracture.

The rule of privileged communication was defined and thoroughly discussed. The importance of malpractice insurance was emphasized.

Because of the liklihood of all physicians to appear sometime in court, importance of evidence and testimony was stressed. The following suggestions were given for the prospective physician witness on the stand:

1. Before obligating yourself to testify as an expert, except in a malpractice suit against a physician, have a definite arrangement as to the fee.
2. Have a definite understanding of the merits of the case.
3. If you have never appeared on the witness stand, attend a few trials with the idea of hearing the medical testimony and attempting to see the point of view of the attorneys for both plaintiff and defendant.
4. On the witness stand be honest and sincere.



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5. Be prepared. Expect anything on cross examination.
6. Be yourself.
7. Listen carefully to each question and be sure you understand it. If it is not clear ask that it be repeated.
8. If you do not know, say so. A frank answer, even though it is an admission of lack of knowledge, is better than a bluff.
9. Do not lose your temper. Be as courteous to the opposing counsel as you are to your own.
10. Do not volunteer testimony. Remarks which are not necessary in answers to questions are liable to bring forth objections that the testimony is irrelevant or to give the impression that the witness is partisan. If you are serving as an ordinary witness, give only the facts and state them clearly and concisely. If called as an expert you are expected to render an opinion.
11. Talk loudly enough to be heard. The judge, the jury, the court stenographer and the attorneys must hear everything you say. Speak directly to the jury, as they especially need to know what you have to say. If there is no jury, direct your remarks to the judge.
12. Do not "play up to the spectators." Try to act as if you were in your own office discussing the case with the attorney who summoned you.

## READING NOTICES

### ARMY RECOGNIZES CANNED FOOD MANUAL

Recognition by the Quartermaster General in Washington was recently given to the "Canned Food Reference Manual." The American Can Company was authorized to send copies of the manual to the Commanding General and the Quartermaster at each Corps Area Headquarters; one to the Medical Officer and the Quartermaster at each of the Posts, Camps and Stations of the Army; and one to the Commanding Officer at the various Purchasing Depots of the Army throughout the country.

### PRESERVED BLOOD PLASMA

The stimulus of war has aroused great interest in substitutes for whole blood, and many intensive investigations are being undertaken in this field both from the laboratory and clinical standpoints. The indications for intravenous administration of blood plasma, such as in shock without hemorrhage, in burns, for administration of antibodies and for the maintenance of plasma protein, and even severe hemorrhage, are now rather definite.


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### REDUCTION IN RATES ANNOUNCED

The Physicians Casualty Association of America has made a reduction in the $25.00 per week accident and health insurance, of $1.00 per year; in the $50.00 per week accident and health insurance, of $2.00 per year, and in the $75.00 per week accident and health insurance, of $3.00 per year.

### SCHERING'S NEW SULFONAMIDE NOW AVAILABLE FOR R USE

Sulfacetimide, a new and potent derivative of sulfanilamide, is to be marketed under the trade name Sulamyd by the Scheering Corporation, Bloomfield, New Jersey.

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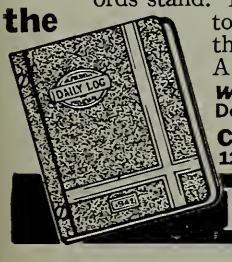


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*Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

OUTLINES OF INDUSTRIAL MEDICAL PRACTICE. By Howard E. Collier, M.D. (Edin.) Ch.B., Formerly Reader in Industrial Hygiene and Medicine, University of Birmingham. Certifying Factory Surgeon, Etc. A William Wood Book. Baltimore: The Williams & Wilkins Company, 1941. Price: $5.00.

While Industrial Hygiene in Great Britain apparently is not so well defined as in the United States the intimate details of this English book make it well worth while. The material is recommended to all physicians who have more than a passing interest in Industrial Health.

* * *

CEREBROSPINAL FEVER. By Denis Brinton, D.M. (Oxon), F.R.C.P. (Lond.). Physician in Charge of the Department for Nervous Diseases, St. Mary's Hospital, London; Assistant Physician to Out-Patients, National Hospital for Nervous Diseases, Queen Square, London: Physician to the Royal London Ophthalmic (Moorfield) Hospital, London; Consultant Neurologist to the London County Council. A William Wood Book. Baltimore: The Williams & Wilkins Company, 1941. Price: $3.00.

The English view point of the "Universal Disease." Emphasis is placed on the use of sulfonamides. The only plates are four, and they are of sulfonamide rashes. It is an interesting and instructive monograph.

* * *

ESSENTIALS OF DERMATOLOGY. By Norman Tobias, M.D., Senior Instructor in Dermatology, St. Louis University; Assistant Dermatologist, Firmin Desloge and St. Mary's Hospitals; Visiting Dermatologist, St. Louis City Sanitarium and Isolation Hospital. Philadelphia: J. B. Lippincott Company, 1941. Price: $4.75.

For the general practitioner and the medical student the author presents in a simple fairly complete manner all of the common skin ailments and most of the rarer dermatoses. The treatment has been simplified and is easily followed. Most of the pictures are new and descriptive. It is surprising how the author has included so much information in a small volume. It is recommended for the general practitioner.

* * *

THE AMERICAN ILLUSTRATED MEDICAL DICTIONARY. A complete Dictionary of the Terms Used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Nursing, Veterinary Science, Biology, Medical Biography, etc., with the Pronunciation, Derivation, and Definition. By W. A. Newman Dorland, A.M., M.D., F.A.C.S.; Lieut.-Colonel, M.R.C., U. S. Army; Member of the Committee on Nomenclature and Classification of Diseases of the American Medical Association; Editor of "American Pocket Medical Dictionary." Nineteenth Edition. revised and enlarged with 914 illustra-

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tions, including 269 portraits. With the collaboration of E. C. L. Miller, M.D., Medical College of Virginia. Philadelphia and London: W. B. Saunders Company, 1941. Price: Plain, $7.00; Thumb-Indexed, $7.50.

This is the nineteenth edition of a volume first published in 1900. In this edition more than two thousand new words have been added. There are well over a hundred tables and several hundred portraits besides the usual dictionary features. This is the dictionary in which the editorial department of the American Medical Association coöperates. The typography and binding are very good.

* * *

MODERN MARRIAGE. A Handbook for Men. By Paul Popenoe, General Director, the American Institute of Family Relations, Los Angeles, Calif.; Lecturer in Biology, University of Southern California. Second Edition. New York: The MacMillan Company, 1940. Price: $2.50.

Popenoe is a Lecturer in Biology and approaches the subject of marriage from the biological point of view. An entire chapter is devoted to proposals including a table of the number of proposals the average woman of a certain age group receives. The volume should be of some value to the physician who wishes some means of informing the young man who is serious about the whole thing.

* * *

MANUAL OF THE DISEASES OF THE EYE. For Students and General Practitioners. By Charles H. May, M.D., Consulting Ophthalmologist to Bellevue, Mt. Sinai and French Hospitals, New York; Formerly Chief of Clinic and Instructor in Ophthalmology, Medical Department of Columbia University, and Director of the Eye Service at Bellevue Hospital, New York. Seventeenth Edition, Revised with the assistance of Charles A. Perera, M.D., Associate in Ophthalmology, College of Physicians and Surgeons, Medical Department of Columbia University, New York; Asst. Attending Ophthalmologist, Presbyterian Hospital, New York. With 387 illustrations including 32 plates, with 93 colored figures. Baltimore: William Wood and Company, 1941. Price: $4.00.

William Wood and Company presents the seventeenth edition of May's "Manual of the Diseases of the Eye" originally published in 1900. This standard textbook includes appropriately, an appendix giving the ocular requirements for admission to the Army, Navy, Marine and Air Service in the United States. The changes necessitated by recent advances in this subject in the last two years have been added and some parts have been rewritten. This book provides an excellent reference for the general practitioner who needs assistance in common ophthalmological conditions.

* * *

NECROPSY. A Guide for Students of Anatomic Pathology. By Bela Helpart, M.D., Assistant Professor of Pathology and Bacteriology, Louisiana State University School of Medicine, and Visiting Pathologist, Charity Hosptal of Louisiana at New Orleans. St. Louis: The C. V. Mosby Company, 1941. Price: $1.50.

This is a handy practical protocol which cannot help but produce a valuable autopsy if the outline and suggestions of the author are followed.

* * *

ABDOMINAL SURGERY OF INFANCY AND CHILDHOOD. By William E. Ladd, M.D., F.A.C.S., William E. Ladd Professor of Child Surgery at Harvard Medical School; Chief of Surgical Service, The Children's Hospital, Boston; and Robert E. Gross, M.D., Associate in Surgery, the Harvard Medical School; Associate Visiting Surgeon, The Children's Hospital; Associate in Surgery, The Peter Bent Brigham Hospital, Boston. Philadelphia and London: W. B. Saunders Company, 1941. Price: $10.00.

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in this field. This volume deals with abdominal surgery of this age group and is well illustrated with line drawings and cuts and discusses informatively the variations which are found in children. For the pediatrician and the surgeon this book should be of considerable importance and to the general practitioner, of value.

* * *

Annual Reprints of the Reports of the COUNCIL ON PHARMACY AND CHEMISTRY of the American Medical Association for 1940. With the comments that have appeared in THE JOURNAL. Chicago: American Medical Association, 1941. Price: $1.00.

The American Medical Association has published this small volume giving the reports of the Council on Pharmacy and Chemistry together with the comments which have appeared in *The Journal of the A.M.A.* For a permanent reference of the truth on new drugs this book is recommended to all physicians.

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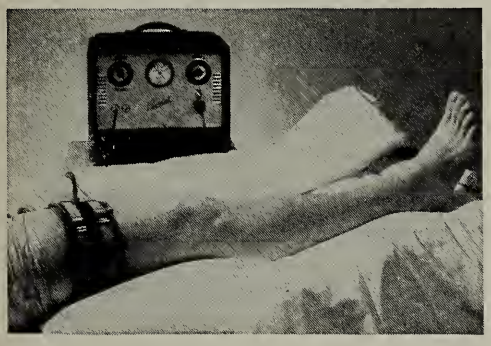

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The present Board of Directors includes a full representation of the medical profession by Councilor Districts. Likewise, as provided in the governing law, proper representation is given to the public through lay members.

### Points of Information

Two phases of the operation of Michigan Medical Service are of particular interest: (1) Why is there some delay in making payments to doctors; (2) Why was the pro ration necessary.

*Why Some Delay in Making Payments to Doctors.*—The majority of Service Reports received by the tenth of the month following the month of service are approved by the Medical Advisory Board for payment by the fifteenth of the month. Checks are then drawn so that payments are received by doctors before the thirtieth of the month following the month of service.

The chief reason for any delayed payment is late reporting of services by the doctor's office. At least 40 per cent of the service reports are received one or more months late. Many of the reports received are incompletely filled out or do not present sufficient information to identify the patient as a subscriber. Consequently, there may be delay in ascertaining whether the patient is eligible for services and in having the report approved for payment.

In a small percentage of the cases there may be some delay because of a precedent type of service which necessitates the obtaining of special information through the Medical Advisory Boards or other committees before appropriate payment can be authorized.

At the meeting in Grand Rapids, there was a general session for doctors' office secretaries to acquaint them with the procedures for billing Michigan Medical Service. Outlines of the arrangements for billing have been distributed widely. Prompt payment will be facilitated if the

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● *The name is never abbreviated; and the product is not like any other infant food—notwithstanding a confusing similarity of names.*

The fat of Similac has a physical and chemical composition that permits a fat retention comparable to that of breast milk fat (Holt, Tidwell & Kirk, Acta Pediatrica, Vol. XVI, 1933) . . . In Similac the proteins are rendered soluble to a point approximating the soluble proteins in human milk . . . Similac, like breast milk, has a consistently ZERO curd tension . . . The salt balance of Similac is strikingly like that of human milk (C. W. Martin, M. D., New York State Journal of Medicine, Sept. 1, 1932). *No other substitute resembles breast milk in all of these respects.*

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doctor will see that his office carries out the following simple procedures:

(a) Send the Initial Service Report immediately when services are first requested, entering the correct name, address and certificate number of the patient and designating the services required. Failure to send the Initial Service Report immediately will delay authorization of payments. If the Initial Service Report is not sent promptly, there is no need to send this report along with the Monthly Service Report.

(b) Send the Monthly Service Report, designating the exact services rendered and indicating the patient's name and certificate number, not later than a few days following the month during which services were rendered.

Monthly Service Reports should be sent for services rendered during each month.

The office personnel and procedures of Michigan Medical Service are constantly improving and doctors may expect that reports sent in on time will be paid promptly. If your report is not paid promptly, do not send another Monthly Service Report; simply send a letter giving the full name of the patient and the date of services, with a request that payment be remitted.

*Why Was Proration Necessary?*—After payment of the full Schedule of Benefits for thirteen consecutive months, the combination of a greatly increased volume of services and late reporting on the part of the doctors made it necessary to pay on a prorated basis of 80 per cent until a determination could be made of the cost of services for the particular month compared with the income from subscribers. This determination can be made only when all late reports are received, which means after a period of at least 90 days following the month of services, during which time reports may be authorized for payment. It is recognized that the prorated payments are tentative and that the reduced amount is an obligation that will be repayable to the doctors out of surpluses that may be accumulated.

It is also believed that the prospects for repayment are favorable. An analysis of groups that have been enrolled for twelve months indicates that the income is more than sufficient to cover the cost of services and administration expense. During the first five months of enrollment there is a large volume of services required for the correction of pre-existing conditions such as female pelvic disorders, hernias, appendectomies, and tonsillectomies. In subsequent months, costs of services are less. Experience records also show that one-half of all appendectomies and tonsillectomies required by a group of subscribers will be performed during the first few months of enrollment.

In addition to the improved financial status for groups enrolled longer than five months, the present season of the year from September to January is a period of lower utilization of services.

---

*Harper Hospital Bulletin,* a new publication by members of the Harper Hospital Staff, Detroit, Michigan, will appear monthly from October to June. Members of the profession may obtain copies of the *Harper Hospital Bulletin* by addressing The Editor, 3825 Brush Street, Detroit, Michigan.

The Editorial Board consists of the following:
Editor in Chief—Harold C. Mack, M.D.
Assistant Editor—Gaylord S. Bates, M.D.

Departmental Editors: Surgery—Harold B. Fenech, M.D.; Internal Medicine—William Reveno, M.D.; Otolaryngology—Arthur Hammond, M.D.; Ophthalmology—Arthur Hale, M.D.; Pathology—Lawrence Gardner, M.D.; Obstetrics and Gynecology—Roger Siddall, M.D.; Roentgenology—Traian Leucutia, M.D.

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(1) 1935. J. Home Econ. 27, 658.
(2) 1931. Ind. Eng. Chem. 23, 1066.

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# ✶ HALF A CENTURY AGO ✶

## THE NEED FOR A BETTER STUDY OF DISEASES OF THE SKIN*

W. F. BREAKEY, M.D.
Ann Arbor, Michigan

It is not claimed that this paper presents ideas especially original or new in matter or form; and the principal excuse, if not justification, it can have is the, perhaps, presumptuous opinion that there is still need for repetition of effort to rescue from quackery a branch of medicine too much given over to the charlatan and to encourage more study of it by the general practitioner, as alike beneficial to his patients, creditable to medical science, and profitable to himself. If it be the means of encouraging any practitioner to more thorough investigation and successful treatment of a class of cases that have been too much the opprobrium of medicine, it will not be wholly in vain.

Its exterior position, great area, and peculiar functions, make the skin an important organ from a hygienic point of view. From a pathological and therapeutical standpoint, the importance of a knowledge of the diseases of the skin, to the general practitioner of medicine, is so obvious as not to need argument.

Considering the extent of surface of the skin, the wonderful adaptability to the successful performance of its varied and important functions, its protection to subjacent tissues, while it is also the principal terminus of sensory nerves, serving also as a great eliminator and emunctory; its tolerance of heat and cold; its exposure to injuries, to atmospheric and other poisons and irritants, by contact, by textures and colors of clothing, by its lack of care, and by mal-medication; to say nothing of parasitic, inherited, or exanthematous diseases—when we consider these and many unmentioned risks, it is not strange that the skin is the seat of such a variety of diseases.

It is the medium through which external influences act on the body, and the channel by which many communicable diseases find their way to other organs and tissues. Beside the diseases to which its own tissues are subject, its conditions often furnish indications of disease of other organs. It will be generally conceded by the average medical man that while modern medical science has taught us much of the structure and function of the skin, we have not made corresponding progress in the hygienic care or successful treatment of its diseases.

Indeed, it is only stating it moderately to say, that the whole field of diseases of the skin and its appendages, has been too much neglected by the general practitioner. This, however, is not wholly his fault, as the colleges, also, until within a very few years, have given students very insufficient instruction and facilities for the study of dermatology.

And the people who are too prone, at best, to trust themselves to advisers who promise the most—even if irresponsible—in these cases are furnished an excuse for patronizing quackery, by reason of the failure of the general practitioner to give them sufficient attention.

It is curious that while some practitioners seem to have thought it too difficult for the ordinary physician, others have regarded it as too trivial to study the pathology of diseases of the skin. Others too, have underrated the importance of these cases, because so many of them do not endanger life, and are often found in persons of otherwise good health. But it should be remembered that many disorders of the skin, which appear slight, may cause much distress to those afflicted; others are important or serious because of their bearing upon the general health and usefulness of the sufferers and their friends. Some are attended with much irritation and pain. Many cases cause great disfigurement, and are regarded with a sort of instinctive abhorrence. There is a tendency in the popular mind to classify all unsightly diseases of the skin as communicable. Thus the subjects of innocent cases of acne, eczema, and psoriasis are sometimes shunned as lepers, or subjected to suspicion of having inherited or acquired a disease in some way discreditable to their morals, while less conspicuous but genuine cases of syphilis go unchallenged and unguarded. And this popular misconception is often strengthened by erroneous or thoughtless professional opinion.

The supposed difficulties of a successful study of skin diseases have been exaggerated, by the idea that the pathology was different from that of other tissues. Hillier wrote 25 years ago that, "Probably no class of diseases was less understood," and other authors, foreign and American, have, in one way and another, repeated the statement later. Prominent among the causes of this difficulty is the great diversity of names which have been given to diseases of the skin, by different authors, some diseases having several different names, and the same name having been given to diseases totally distinct from each other. Even the same writer has given new names to diseases described previously by himself under other names! And, as if this was not enough to confuse, the difficulties were further increased by "endless varieties of classification and extreme subdivision," "the same disease being given different names, from the different appearances presented in different stages of its progress, or variations in severity," etc.

As indicating progress, Fox (F.S.), writing 15 years later than Hillier, says as to the general character of skin diseases: "There is nothing especially in the pathological changes occurring in the tissues in these disorders;"

That the idea of the student that he is about to encounter a "new set of pathological phenomena" is not true;

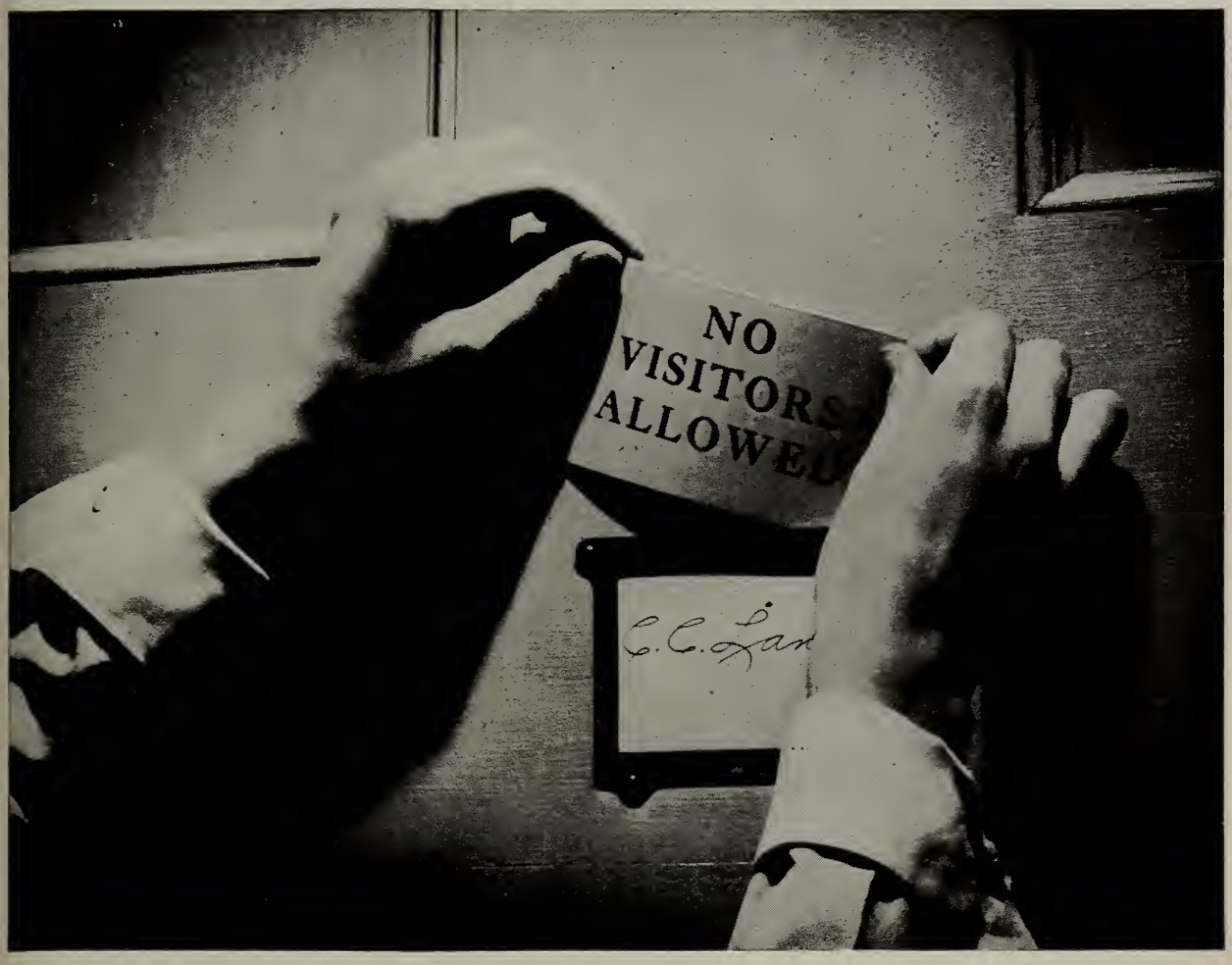
That (then) recent researches in cutaneous pathology have cleared the way to a more correct knowledge of the changes taking place in the skin in disease, and as a consequence, it is becoming more and more apparent, that these morbid processes are identical with those occurring elsewhere in the body. And it is still more noteworthy and satisfactory now than then, that the student of today who is compelled to acquire pathological knowledge over so wide a field, is beginning to discover that his study of skin diseases is rendered comparatively easy, because of the complete similarity which has now been demonstrated between the facts of general and skin pathology.

As Taylor so aptly states, it will therefore be seen that skin diseases are intimately allied to the general

*(Continued on Page 856)*

*Presented at the twenty-sixth annual meeting of the Michigan State Medical Society at Saginaw in 1891.

**"SEE YOUR DOCTOR."** **Reproduced below is Number 171 of a series of full-page advertisements published by Parke, Davis & Co. in the interest of the medical profession. This "See Your Doctor" campaign has been running in *The Saturday Evening Post* and other leading magazines for thirteen years.**




# The man who nearly died . . . from a few kind words

BEYOND THAT DOOR lies a very sick man. True, his doctor says he is going to pull through. But he has come mighty close to paying a tragic price for a few words of free advice from a well-meaning friend.

When he complained of a nagging pain in his abdomen, his friend said: "You've probably eaten something that's poisoned you. Here's what *I'd* do . . ."

So he promptly followed his friend's suggestion and took a cathartic. And in a matter of hours he was being rushed by ambulance to the hospital . . . with a ruptured appendix.

His friend, of course, had acted from the kindest of motives. But he didn't know that an abdominal pain might mean acute appendicitis, in which case a cathartic should never be taken.

Unfortunately, appendicitis is only one of many illnesses where amateur medical advice can result in tragedy. Yet, human nature being what it is, many people just can't resist the temptation to offer advice when a friend is sick.

Intelligent medical treatment depends upon various factors which only a physician is qualified to evaluate. When something seems wrong with you, it is the part of wisdom to observe this common-sense rule: Take a friend's advice about buying a radio, a car, or even a home if you wish; but don't let him advise you about your health.

Don't let a friend who *means* well tell you how to *get* well. To get well, and *keep* well, the man to see is your physician.

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**SEE YOUR DOCTOR**

## COUNTY MEDICAL SOCIETY MEETINGS

*Bay*—Wednesday, October 8, 1941—Bay City—

*Berrien*—Wednesday, August 13, 1941—Benton Harbor—Speaker: LeMoyne Snyder, M.D., Lansing. Subject: "Scientific Investigation of Evidence." Thursday, September 25—Benton Harbor—Speaker: C. S. Scuderi, M.D., Chicago. Subject: "Treatment of Compound Fractures." Wednesday, October 15—Niles—Speaker: Carl Langenbahn, M.D., South Bend, Indiana. Subject: "Surgical Aspects of Hematuria."

*Calhoun*—Tuesday, September 9, 1941—Battle Creek—Speaker: Walter Schiller, M.D., Chicago. Subject: "New Aspects in Relation to Pathology of Ovarian Tumors." Tuesday, October 7, 1941—Battle Creek—Speaker: Herman H. Riecker, M.D., Ann Arbor. Subject: "Classification and Management of Hypertension."

*Delta-Schoolcraft*—Wednesday, October 29, 1941—Escanaba—Speaker: M. Cooperstock, M.D., Marquette. Subject: "Care of the Premature Baby."

*Dickinson-Iron*—Thursday, September 4, 1941—Iron Mountain.

*Ingham*—Tuesday, September 9, 1941—Lansing—Speaker: LeMoyne Snyder, M.D., Lansing. Subject: "Medical Evidence."

*Ionia-Montcalm*—Tuesday, October 14, 1941—Lake Odessa—Speaker: Leland M. McKinley, M.D., Grand Rapids—Subject: "Newer Concepts and Treatment of Shock."

*Kalamazoo*—Tuesday, October 21, 1941—Fort Custer—Program by medical officers at Fort Custer.

*Kent*—Tuesday, October 14, 1941—Grand Rapids—Speaker: A. C. Corcoran, M.D., Indianapolis. Subject: "Recent Advances in the Study of Hypertension."

*Marquette-Alger*—Tuesday, September 30, 1941—Marquette—Speaker: Frank V. Theis, M.D., Chicago. Subject: "Diagnosis and Treatment of Peripheral Circulatory Disturbances."

*Muskegon*—Friday, September 19, 1941—Muskegon—Speaker: H. Ivan Sippy, M.D., Chicago. Subject: "Gastro-Intestinal Disorders." Friday, October 17—Muskegon—Program of medical motion pictures.

*Northern Michigan*—The Northern Michigan Medical Society adopted the following resolution at its August meeting:

"Whereas, Schedule A represents the lowest schedule of fees that physicians can work under (i.e., cost price or one-half regular fees;

"And Whereas, In the past the members of the Northern Michigan Medical Society have done county and state work at less than cost prices;

"And Whereas, Federal governmental agencies during the present emergency are demanding more and more work from physicians without compensation, necessitating that they be paid at least cost price for county and state work;

"And Whereas, the rising costs of living, medicines, salaries, et cetera, have increased the physicians' expense in delivering service;

"Be It Resolved, That the members of the Northern Michigan Medical Society hereby notify the Social Welfare Boards of the counties of Emmet, Cheboygan, Charlevoix, and Antrim that, starting September 15, 1941, Schedule A of 1937 as outlined by the Michigan Crippled Children Commission will be the minimum fees at which services will be performed for the county Social Welfare Boards."

*Shiawassee*—Thursday, October 16, 1941—Owosso—Speaker: J. M. Brandel, M.D., Owosso, will present and discuss motion picture on electrocardiography.

*Washtenaw*—Tuesday, October 14, 1941—Ann Arbor—Speaker: Otto Engelke, M.D., Ann Arbor. Subject: "Washtenaw County Health Unit."

*Wayne*—Monday, October 6, 1941—Detroit—Speaker: D. W. Gordon, Murray, M.D., Toronto. Subject: "The Use of Heparin in Blood Vessel Surgery and Thrombosis. Monday, October 20—Detroit—General Practice Meeting. Joint session with Detroit Dermatological Society; round table on dermatology. Monday, October 27—Detroit—Speaker: Michael L. Mason, M.D., Chicago. Subject: "Significant Factors in the Development of Infections of the Hand." Monday, November 10—Detroit—Speaker: Ernest E. Irons, M.D., Chicago—Subject: "Aspiration Pneumonia." Monday, November 24—Detroit—Surgical Meeting. Speaker: Frederick A. Coller, M.D., Ann Arbor

*West Side (Wayne)*—Wednesday, October 15, 1941—Detroit—Social meeting for doctors and their wives.

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## MSMS DISTRICT MEETINGS IN FULL SWING

The following Councilor District meetings have been arranged or already have been held: Seventh District at Marlette on October 14, T. E. DeGurse, M.D., Councilor. Other officers attending included Council Chairman A. S. Brunk, Detroit; Speaker P. L. Ledwidge, Detroit; Secretary L. Fernald Foster, Bay City; and Executive Secretary Wm. J. Burns.

The *Tenth District* met at Grayling on October 21, Roy C. Perkins, M.D., Councilor. MSMS officers attending included W. E. Barstow, M.D., St. Louis; E. F. Sladek, M.D., Traverse City; Secretary Foster and Execntive Secretary Burns.

The *Third District* met at Battle Creek on October 28, Wilfrid Haughey, M.D., Councilor. MSMS officers included President H. R. Carstens, M.D., Detroit; Vernor M. Moore, M.D., Grand Rapids; R. J. Hubbell, M.D., Kalamazoo; Secretary Foster and Executive Secretary Burns.

The *Eighth District* met at St. Louis on November 6. W. E. Barstow, M.D., is Councilor. Officers who attended include President H. R. Carstens, M.D., Detroit; Councilors Roy C. Perkins, M.D., Bay City and Ray S. Morrish, M.D., Flint; and Secretary Foster and Executive Secretary Burns.

The *Fourteenth District* is scheduled for November 11 at Ann Arbor, L. J. Johnson, M.D., Councilor. Attending officers will include President Henry R. Carstens, M.D., Detroit; President-Elect Howard H. Cummings, M.D., Ann Arbor; Speaker P. L. Ledwidge, M.D., Detroit; and Secretary Foster.

The *Fifth District* is also scheduled for November 11, but at Grand Rapids. Vernor H. Moore, M.D., is Councilor. Officers who will attend this meeting include Wilfrid Haughey, M.D., Battle Creek; Editor Roy H. Holmes, M.D., Muskegon; R. J. Hubbell, M.D., Kalamazoo; Council Chairman Brunk and Executive Secretary Burns.

The *Eleventh District* plans to meet in Muskegon on November 21. Roy H. Holmes, M.D., is Councilor. Attending officers will include Council Chairman A. S. Brunk, Councilors Vernor M. Moore, and Wilfrid Haughey, Secretary Foster and Executive Secretary Burns.

The *Ninth District* will meet in Traverse City on December 5 with Councilor E. F. Sladek, presiding. Officers at this meeting will include President Henry R. Carstens, M.D., Detroit; Editor Roy H. Holmes, Muskegon; Councilors Barstow and Perkins, Secretary Foster and Executive Secretary Burns.

The *Fourth District* will meet in St. Joseph on December 17. R. J. Hubbell, M.D. is Councilor. Visiting officers will be Councilors V. M. Moore, Wilfrid Haughey, Vice Speaker George H. Southwick of Grand Rapids, Secretary Foster and Executive Secretary Burns.

The 1941 District Meetings are being conducted as "discussion conferences" with the following important subjects forming the basis for most of the discussion: (a) Michigan Medical Service, (b) The M.S.M.S. Journal, (c) County Society Meetings, (d) County Health Units, (e) Ethics, (f) Medical Welfare.

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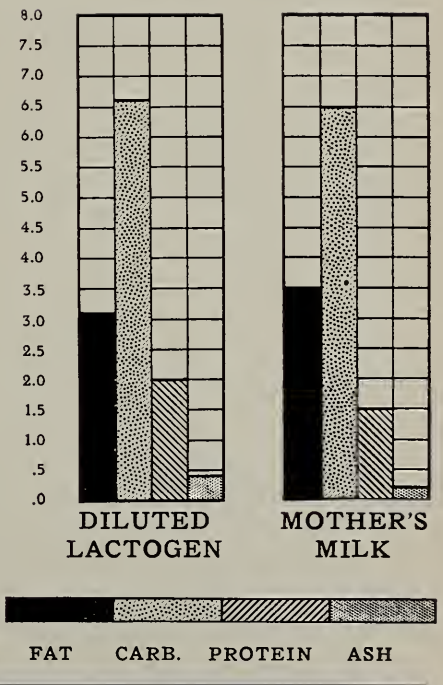


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*"My own belief is, as already stated, that the average well baby thrives best on artificial foods in which the relations of the fat, sugar, and protein in the mixture are similar to those in human milk."*

*John Lovett Morse, A.M., M.D.*
*Clinical Pediatrics, p. 156.*

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# READERS' SERVICE

## CARCINOMA OF THE STOMACH WITH PARTICULAR REFERENCE TO DIAGNOSIS AND RESULTS

The only hope for cure of gastric cancer resides in recognition of the disease at a sufficiently early stage to permit its surgical removal. The means whereby this disease can be recognized, at this stage, when the opportunity is presented, are within the means of us all, namely, a carefully taken history, a clear appreciation of the symptoms which may be produced by early cancer in the stomach, and insistence on competent roentgenologic diagnosis of the stomach in any case in which gastric cancer is even faintly suspected. In addition, an accurate differential diagnosis of any gastric lesion which either may be or might become carcinomatous is essential. The benefit of exploratory laparotomy should be given to any patient who has gastric cancer, when there is even a small chance that the lesion might be removed, unless obvious metastasis already is present. Approximately one-third of the patients who have gastric resection performed for carcinoma of the stomach and survive the operation will live for five or more years following removal of the growth. Although the ultimate prognosis of gastric carcinoma is not bright, by increasing effort and diligence on the part of the medical profession it is hoped that end results gradually may be improved.—James T. Priestley, M.D., Rochester, Minn. (See page 867.)

## EFFECT OF ORAL ADMINISTRATION OF DIETHYLSTILBESTROL ON MENOPAUSAL SYMPTOMS

The literature on diethylstilbestrol is reviewed briefly. The author stresses the fact that adequate therapeutic effect in the majority of menopausal patients can be obtained from small doses of diethylstilbestrol equivalent to 0.5 mg. three to seven times weekly. The clinical results are similar to those following the administration of the natural estrogens. Toxic effects appeared in about 7 per cent of the series of thirty patients treated. He gauged the efficiency of the drug on subjective evidence alone, the relief of flushes, rather than the objective evidence as vaginal and endometrial biopsies and vaginal smears.—J. Wm. Peelen, M.D., Kalamazoo. (See page 873.)

## THE MODERN TREATMENT OF TRAUMATIC SHOCK

The modern treatment of traumatic shock resolves itself into a critical evaluation of the clinical pathological processes taking place which tend to cause a disparity between the volume of blood and the volume capacity of the vascular tree. This disparity results from the reciprocal effects of two major factors as demonstrated by Moon: Capillary atony and tissue anoxia; either of these factors will cause development of the other and this reciprocal reaction gives a self-perpetuating and irreversible circulatory deficiency. Oligemia, hemoconcentration, exemia, anoxemia, acarbia, acapnia, hyperhydria and hyperpotassiumemia are evidences of the disturbed physiology which can be corrected by the immediate and intelligent administration of blood plasma, pectin, adrenal cortex hormone, concentrated oxygen; opium derivatives and external heat are adjunct therapeutic measures.—Henry A. Hanelin, M.D., Marquette. (See page 876.)

## END-TO-END ANASTOMOSIS: MATHEMATICAL APPROACH TO THE CAUSES OF MARGINAL GANGRENE

By mathematical analysis is shown that the cut surfaces of the bowel lumina, which are to be united by the usual technique of end-to-end anastomosis, do not lie in a plane but in a hypoid curve. This curve permits determination of the relative tension in all parts of the suture line; the maximum tension being located always contramesenterially, where pathologists find almost all marginal gangrenes. It is suggested to cut the bowel by a method calculated to undo the hypoid.—A. H. Mollman, M.D., Grand Rapids. (See page 882.)

## EXPERIENCES IN PREMARITAL COUNCIL IN PRIVATE PRACTICE

The purpose of the paper is to give in outline the general point of view acquired from efforts to meet the increasing demand for premarital examination and advice. The somewhat uncertain and unsatisfactory results often obtained show the lack of satisfactory knowledge on the subject and the need to give more time and consideration to premarital examinations. Girls should be urged to come early rather than late for premarital council, as the most effective service often extends over a period of weeks. Contraceptive advice is given, but planned parenthood is urged as soon as seems possible to both husband and wife. If the schools and colleges were to give adequate education on the subjects of sex and marriage, it would leave the doctors more time for the technical services which give the patients the treatment and reassurance that they need.—Richard N. Pierson, M.D., New York. (See page 884.)

## HALF A CENTURY AGO

*(Continued from Page 852)*

domain of medicine and surgery, and should be studied, not in a narrow and special manner, but in the broad light of pathology and medicine. And it is one of the important signs of progress in dermatology that today the morbid changes in the skin are almost universally admitted to be, in very many instances, more or less intimately associated with, if not the expression of, deranged systemic conditions.

It is comparatively easy to become familiar with the dermal affections of external origin. The greatest difficulty will be found in determining the etiological factor in cases in which external irritation plays little or no part. Yet with the increased knowledge of general pathology, the improved processes, and facilities for investigation, patient effort and persistent trial will discover causes, sometimes obscure, or overlooked by hasty examination, on which a diagnosis can be made that goes a long way to ensure successful treatment.

It follows, then, that the general practitioner, who, by his knowledge of general pathology, is prepared to diagnose, of necessity should also be well equipped for the treatment of these cases.

They may not be so numerous in every locality as to furnish a full clinical assortment, but enough will be found to illustrate many varieties of dermal diseases, and no class of cases will better repay a careful study in etiology, pathology and therapeutics, local and general.

Nearly all are amenable to treatment. No patients are more grateful than those relieved of deformities or disfiguring diseases. Many of the most unpromising will be found less intractable than they appear, and to yield to appropriate treatment, while the hopelessly incurable cases, will give credit for accuracy in prognosis, even if it be unfavorable.

*A typical Lederle development—*

# SERUM REFINING

SERUM SICKNESS used to be a serious obstacle to the successful application of serotherapy. So great was the fear of these reactions that at times the patient was even deprived of life-saving treatment.

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CHEVRON OF SERVICE

## CONVENTION NOTES

Michigan newspapers gave 1208 inches in their news columns, and 70½ inches in their personal columns—a total of 1278½ inches of space—to the MSMS 76th Annual Convention, or 11,506½ lines!!! A number of these stories were first page—and this despite war, politics, and pretty girls.

* * *

*The larger cities* of Michigan were represented at the 1941 Grand Rapids Convention as follows: Ann Arbor, 30; Battle Creek, 35; Bay City, 13; Detroit, 201; Flint, 51; Grand Rapids, 194; Holland, 12; Jackson, 28; Kalamazoo, 56; Lansing, 76; Monroe, 7; Mt. Clemens, 2; Pontiac, 12; Muskegon, 52; Port Huron, 7; Saginaw, 35 and Sault Ste Marie, 6. The balance of those registering came from towns and villages in all parts of the state.

* * *

Three Grand Rapids service clubs were addressed by representatives of the Michigan State Medical Society on the occasion of the 1941 MSMS Convention.

Wilfrid Haughey, M.D., of Battle Creek addressed the Kiwanis Club on "Medical Progress," Monday, September 15; L. Fernald Foster, M.D., Bay City, spoke to the Lions Club concerning "Michigan Medical Service" on Tuesday, September 16; and Howard H. Cummings, M.D., of Ann Arbor addressed the Rotary Club on "Postgraduate Medical Education," Thursday, September 18.

* * *

M. M. Ricketts, Sales Manager of Petrogalar, flew from Philadelphia to Grand Rapids, to attend the MSMS Convention. After spending a day in Grand Rapids, Mr. Ricketts returned by plane to Philadelphia.

Ted Lewis of Johnson & Johnson came to Grand Rapids from New Brunswick, N. J. to view the MSMS Technical Exhibit.

* * *

Rubber stamps were used by at least six physicians who roamed through the exhibits stamping their signatures at the various booths!!!

* * *

Speaking of dispensing: Coca-Cola distributed 3,360 bottles at the 1941 MSMS Convention; R. B. Davis Company served 1,027 glasses of hot and cold Cocomalt; Philip Morris Company sampled the 2,117 registrants with 9,000 cigarettes; the Mennen Company distributed 757 bottles of oil and an equal number of cans of borated powder; the H. J. Heinz Company dispensed 716 servings of tomato juice; the John Wyeth & Brother Company had 448 customers for their liquid BeWon; the Kalak Water Company found 587 thirsty customers; and Pet Milk distributed 3,507 miniature Pet Milk cans.

Incidentally, 1,280 glasses of beer were enjoyed at the MSMS Smoker of September 18 (and that's quite an incidental).

* * *

The American Society for the Control of Cancer, Women's Field Army, entered a scientific exhibit at the MSMS Convention. This interesting display was manned by Frank L. Rector, M.D., Field Representative in Cancer for the MSMS Cancer Control Committee, as well as by representatives of the Women's Field Army of Michigan.

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What some of the guest essayists had to say about the 1941 MSMS Convention:

*S. Wm. Becker, M.D.,* Chicago: "I believe that the program presented was one of the best, if not the best, I have ever seen at a state meeting."

* * *

*Robert A. Bier, M.D.,* Major, National Headquarters, Selective Service System, Washington, D. C.: "Your personal and official hospitality, and the kind attention of your Society, endeared them to me, and left a most favorable impression of my short stay in your state. My only regret is that I was not able to visit with you longer and enjoy further your splendid hospitality."

* * *

*James L. Gamble, M.D.,* Boston. "I very much enjoyed my visit to Grand Rapids and wish to express my sincere appreciation of the courtesy and entertainment which I received. The hospitality offered me by the members was intensive."

*Chester S. Keefer, M.D.,* Boston: "You are to be congratulated on the arrangement and conduct of a most successful meeting and I feel certain that both the guests and the members of your Society benefitted greatly by the meeting. Thank you for a very pleasant visit to Grand Rapids at the time of your annual session."

* * *

*George W. Kosmak, M.D.,* New York: "May I take this opportunity to acknowledge the many courtesies extended by your members. The meeting was most enjoyable and the proceedings of great interest and value. The arrangements for the comfort of your guests were perfect and I shall always look back with a great deal of pleasure to my visit to Grand Rapids in 1941."

* * *

*Charles E. Lyght, M.D.,* Northfield, Minn.: "The arrangements before and during my visit to the meeting in Grand Rapids were nothing short of perfect. I assure you it was a great pleasure to be present and I want you to know how much I appreciate the attentive courtesy of my 'ubiquitous host,' and the many others who anticipated my wants almost before I was aware of them myself. The whole meeting had a distinctly friendly touch."

* * *

*William S. Mengert, M.D.,* Iowa City, Ia.: "I would like to take this opportunity to say that your meeting was one of the best organized and well managed of any I have attended, and the hospitality shown me was superb. It was indeed a pleasure to attend the meeting of the Michigan State Medical Society in Grand Rapids and to address your General Assembly."

* * *

*H. G. Poncher, M.D.,* Chicago: "I think your meeting was as well organized as any state medical society I have ever visited. You have a splendid group to talk to, and I enjoyed fraternizing with the men. I had as nice a time as I have ever had at any state medical meeting."

* * *

*Francis E. Senear, M.D.,* Chicago: "I enjoyed being in Grand Rapids very much and felt that the meeting was conducted in an unusually well organized manner. I appreciated the opportunity of meeting many of my old University of Michigan friends on that occasion."

* * *

*V. P. Sydenstricker, M.D.,* Augusta, Georgia: "I assure you that my visit to Michigan was enjoyable in every way. The meeting seemed to me to outclass any state meeting which it has been my privilege to attend in the subject matter of the program and in the interest and earnestness displayed by those attending. The constant kindness and solicitude of my ubiquitous host almost shamed me for I know what a serious interruption I was to his routine. Please express my thanks to The Council for their kindness and accept my personal expression of gratitude to you for the opportunity to attend your meeting.

* * *

*Carroll S. Wright, M.D.,* Philadelphia: "I do not think I ever attended a medical meeting where so much effort was put forth to make the guest speakers enjoy themselves. I thoroughly enjoyed the annual meeting of the Michigan State Medical Society."

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# Carcinoma of the Stomach

## Diagnosis and Results*

By James T. Priestley, M.D.
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James Taggart Priestley, M.D.
*Rochester, Minnesota*

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### Historical Aspect

■ It was Billroth who performed the first successful resection of the stomach for cancer in 1881.[5] The patient on whom Billroth performed this operation was a woman named Teresa Haller, who had a polypoid carcinoma in the distal portion of her stomach. Approximately a third of the stomach was removed and gastro-intestinal continuity was reëstablished by the Billroth I procedure, whereby the end of the stomach is anastomosed directly to the duodenum. The patient's immediate postoperative convalescence was without event, and she was dismissed from the hospital twenty-two days following operation. Unfortunately, the ultimate result was not so brilliant as the immediate postoperative convalescence, and she succumbed four months later from what was termed "cancerous degeneration of the peritoneum." By 1886 partial gastrectomy had been performed thirty-seven times for cancer with a mortality of 73 per cent. The longest length of postoperative life at this time was one and a half years. This could hardly be considered a propitious beginning. However, two important facts had been established: first, that cancer of the stomach could be removed and the patient survive the operation, and second, that at least a certain length of postoperative life might be anticipated following extirpation of a gastric neoplasm. With courage and firm conviction the pioneers in gastric surgery gradually developed this field against very considerable opposition and many difficulties. Dr. W. J. Mayo's first contribution to the subject appeared in 1894,[3] and by 1910[4] he reported 627 operations for gastric carcinoma with resection performed in 36 per cent of cases and a mortality rate of 12 per cent, a record which would compare not unfavorably with certain current reports on the subject. During the ensuing years he published many further reports.

### Etiology

Search was first made many years ago for the etiologic factor in cancer of the stomach, but, as you know, this was unsuccessful. Much of the work which has been done on this subject has dealt with possible precursory changes in the gastric mucosa which might predispose to subsequent malignant change. The possible association of certain forms of gastritis with the later appearance of gastric carcinoma has been stressed frequently. The inherent difficulty in these studies involves the unavailability of microscopic specimens from an appreciable number of stomachs in which carcinoma develops at a later date and also a control group studied similarly in which malignancy does not develop. Recently Dr. E. S. Judd[1] has completed an interesting study of this subject in which he found certain differences between the usual stomach in which carcinoma is present and the apparently normal stomach. In the former he observed definite hyperplasia of the mucous cells, a pronounced degree of atrophy of the chief and parietal cells,

*William J. Mayo Lecture given at the University of Michigan, Ann Arbor, Michigan, April 25, 1941.

lymphocytic infiltration and irregularity of the muscularis mucosa. At times these changes are noted in the apparently normal stomach but are usually less marked under these circumstances. He concluded that carcinoma develops in a stomach damaged probably over a period of years and that the pathogenesis of gastric malignancy is associated directly with the disorganized hyperplasia of the mucous cells. Whether gastric cancer can develop on a previously benign gastric ulcer has been the subject of numerous discussions and will not be considered in detail at this time. The frequent clinical significance of this possible relationship, however, will be discussed later. Virtually all malignant lesions of the stomach are of the adenocarcinoma type as in a recent study 98.3 per cent were found to be of this type and only 1.7 per cent were sarcomatous in nature.[7]

### Diagnosis

From the most recently published statistics it is estimated that carcinoma of the stomach accounts for 37,000 deaths each year in this country alone.[6] Any disease which occurs so frequently and which has such grave implications should be of interest to all engaged in the practice of medicine and surgery. Furthermore there is some evidence to suggest that carcinoma of the stomach is increasing in frequency or perhaps it is being recognized more often than previously. At the present time the only hope for cure of gastric carcinoma resides in its recognition at a sufficiently early stage to permit surgical removal. In addition the only current expectation of reducing the mortality of this disease in the future lies in establishing the diagnosis earlier in a higher percentage of cases so that more patients may be afforded the possible benefits of gastric resection. From these facts alone the importance of early diagnosis is readily apparent. As most of you will be confronted frequently with the first prerequisite of cure for the patient with gastric carcinoma, namely, recognition of the disease, the means by which this may be accomplished seem worthy of emphasis. Those of you who will participate in the second essential to cure; namely, extirpation of the lesion, necessarily will learn the technical procedures by which this can be accomplished at a later time during your hospital training.

How then does one recognize carcinoma of the stomach in its early stages? At times this may be extremely difficult or virtually impossible to accomplish for reasons which will be mentioned. At other times failure to establish the diagnosis at the most opportune time may be solely the responsibility of the physician. Unfortunately, there is no uniform or pathognomonic symptom complex which is present invariably in cases of gastric carcinoma. The first prerequisite for early diagnosis is a clear appreciation of the symptoms which may be caused by early carcinoma of the stomach. Unfortunately, many textbooks describe only the symptoms of advanced gastric carcinoma, at which stage of the disease the patient can derive little benefit from its recognition. Several years ago Wilbur[8] described three syndromes, one of which usually occurs in the presence of gastric cancer. A clear appreciation of these syndromes is most important, I believe, in the detection of operable carcinoma of the stomach. The first and most common is the so-called typical syndrome which usually is presented by a patient of middle or advanced age. Commonly the patient has enjoyed perfect digestion until the rapid onset of dyspepsia, which almost always is constant and progressive in nature. This dyspepsia may vary widely in character and consist of anorexia, discomfort after meals, belching, epigastric distress, nausea and perhaps vomiting. As time progresses there may be loss of weight and strength. A second group of patients who have gastric carcinoma present the so-called ulcer type of syndrome. Individuals in this group may have the "pain-food-ease" sequence commonly associated with peptic ulcer for a brief or prolonged period of time. Because of this fact the danger of instituting medical treatment on a presumptive diagnosis of peptic ulcer without the benefit of competent roentgenologic examination of the stomach is at once apparent. Subsequently symptoms of this type frequently change in one of several ways. They may lose their customary intermittency and become constant or food may aggravate rather than relieve the distress. Nausea and anorexia may supervene, and measures which previously gave relief may now fail to do so. A third group of patients who have gastric carcinoma probably

afford the most difficult diagnostic problem as they present a so-called nondescript type of history and may complain of no symptoms which immediately direct attention to the stomach. Under these circumstances one's clinical suspicions must be quite readily aroused if the true diagnosis is to be established at an early date. In these cases symptoms referable to the gastro-intestional tract may be vague, indefinite or entirely absent. They may consist of constipation, bloating, belching, nonlocalized abdominal discomfort, and perhaps loss of energy, weight and strength. Surprisingly often and for no apparent reason, patients of this group may state that they were in perfect health until an attack of "flu" from which they never fully recovered. Only with increasing experience will the physician at once suspect gastric carcinoma in the case in which it is actually responsible for this group of symptoms, as of course these symptoms may be caused by a variety of other conditions. Whenever an entirely adequate explanation for such symptoms is lacking, roentgenologic examination of the stomach should always be performed.

In the diagnosis of gastric carcinoma, as with other diseases, the orderly sequence of clinical investigation following a carefully taken and accurately evaluated history requires a thorough physical examination and subsequently certain laboratory or other studies. Physical examination of the patient with cancer of the stomach may reveal little or much. In the early case there may be no abnormal findings. In the somewhat more advanced case there may be obvious loss of weight, anemia, and perhaps a palpable mass in some portion of the upper half of the abdomen. In the advanced case evidence of metastasis may be noted in the supraclavicular lymph node on the left side, as stressed by Virchow. In addition, there may be an enlarged nodular liver, metastases palpable on digital examination of the rectum, involvement in the region of the umbilicus and occasionally elsewhere. Such findings are of importance only by indicating the ultimate futility of operation. Laboratory studies, including roentgenologic investigation, are of great value. Blood studies indicate the presence and degree of anemia and also dehydration in case vomiting has been a prominent feature. Gastric analysis may be of some value in the clinical differentiation of benign ulcer and actual carcinoma as the values for the free and the total acidity usually are reduced in the latter condition and may be elevated in case of benign ulcer. It is well to remember, however, that only 50 per cent of cases of gastric carcinoma are associated with achlorhydria.

Of greatest importance is careful roentgenologic examination of the stomach by a competent roentgenologist. Of all examinations and investigative procedures utilized at the present time for the recognition of gastric carcinoma, this is without doubt the single procedure of most usefulness although gastroscopy in skilled hands is assuming a role of increasing importance. In any case in which there is the slightest suspicion of gastric carcinoma the patient should be given the benefit of roentgenologic examination of the stomach despite any inconvenience and difficulty which this may entail. By this means the diagnosis will be established earlier in a higher precentage of cases. During recent years gastroscopy has been assuming increasing importance in the recognition of gastric lesions of all types. It appears possible that in the future this procedure may become of even greater value. When used in conjunction with roentgenologic examination of the stomach, gastroscopy may be of material aid in the differential diagnosis of gastric lesions of questionable nature. It is well for the practical clinician to remember that the gastroscopist as well as the roentgenologist is only human and has certain inherent limitations in his examination and, therefore, may at times be in error. Because of this fact it is obvious that there is no substitute for sound clinical judgment in the correlation and consideration of all the diagnostic evidence available, including the history and physical examination as well as the laboratory data.

### Failure of Diagnosis

What factors, then, are primarily responsible for failure to recognize cancer of the stomach in its early stage? Why does the true nature of the disease remain unrecognized in so many cases until the lesion is definitely inoperable and all hope of cure is lost? The factors responsible for this unfortunate occurrence may be divided into three distinct categories: first, the so-called "lesion factor"; second, the "patient factor," and

third, the factor for which the medical profession is solely responsible. These three factors will be considered in order. Unfortunately, symptoms which may be produced by cancer of the stomach are dependent to a great degree upon the situation of the growth within the stomach and the actual disturbance in normal gastric physiology which it causes. For this reason a relatively small growth situated near the pyloric end of the stomach which disturbs emptying of the stomach will give rise to symptoms much sooner than a growth of similar size situated in the fundus or cardia, which causes no appreciable clinical alteration in gastric function. Lesions in the latter situation may attain very considerable size, unfortunately, and even extend beyond the stomach before they cause recognizable disturbance which directs attention to the stomach. Because of this fact late diagnosis seems inevitable in a certain proportion of cases because of the inherent nature of the lesion itself. At the present time there is no good prospect of overcoming this cause of late diagnosis. In addition, certain growths which are situated extremely high in the stomach and perhaps involve also the lower portion of the esophagus, may be inoperable when first detected, even though they cause symptoms relatively early in the course of their development.

The so-called patient factor which is responsible for late diagnosis in a second group of cases has several different causes. Symptoms may be mild and of little apparent significance at their onset, and for this reason the patient fails to consult his physician early in the course of the disease. An important and perhaps increasing hazard is the institution of self-treatment by the patient, which is promoted all too frequently by commercial advertising of patent remedies or by well-meaning but misinformed friends and relatives. Again the patient may postpone adequate medical examination because of social or financial difficulties. By proper education of the laity, the medical profession should be able to reduce gradually this "patient factor" as a cause of late diagnosis of carcinoma of the stomach.

**The third or "physician's factor" is the one for which the medical profession is solely responsible because of failure to recognize the true nature of the lesion when opportunity for early diagnosis actually is afforded. There are of course numerous reasons which may lead to this failure on our part. Unfamiliarity with, and therefore failure to recognize, the clinical picture which may be presented by patients who have early carcinoma of the stomach is the cause in some cases. Failure to perform a thorough and careful physical examination may permit a small but significant mass in the upper part of the abdomen to remain undetected. Reluctance to secure competent roentgenologic examination either because of expense or local unavailability of adequate facilities may result in postponed diagnosis. Many roentgenologic examinations of the stomach with entirely normal findings must be performed if early carcinoma is to be detected in a high percentage of instances.**

In addition to these obvious factors whereby we, as practitioners of medicine, may be responsible for late diagnosis, there are certain pitfalls in the differential diagnosis of gastric carcinoma against which we must be constantly on guard. Gastric ulcer probably should be placed first in this category. Whether benign gastric ulcer may become during the course of time a true gastric cancer has been a subject of controversy for many years and probably will remain so for some time to come and will not be discussed at this time. The fact remains, however, that certain small ulcerating carcinomas may masquerade as benign lesions both clinically and roentgenologically. It is because of this fact that virtually every gastric ulcer must be viewed with suspicion until it is proved beyond doubt to be benign in character. If operation is not performed this can be accomplished only by instituting medical treatment with the patient under close observation and continuing this treatment until all clinical and roentgenologic evidence of the ulcer has disappeared completely. Furthermore, the patient should be examined subsequently to ascertain definitely that recurrence of the ulcer has not occurred. Any criteria short of these appear inadequate to establish the benignity of a given gastric ulcer with absolute certainty. In this regard it seems important to emphasize the fact that although the roentgenologist has a most remarkable record of accuracy, he is not infallible, as in a recent study it was found that in 10 per cent of cases in which resection was performed for carcinoma of the stomach the roentgenologic

diagnosis was "ulcer." On numerous occasions it has been observed that a malignant ulcer in the stomach may decrease in size roentgenologically during the course of medical treatment which reduces the associated inflammatory reaction. For this reason one must insist on complete disappearance of the lesion before it is considered as a benign ulcer.

In a certain group of cases a perfunctory diagnosis of anemia without satisfactory explanation may permit a gastric carcinoma to attain inoperable proportions before its presence is detected. For this reason roentgenologic examination of the stomach and, in fact, the entire gastro-intestinal tract, should be performed in any case of severe anemia of undetermined cause. Carcinoma of the stomach may cause profound anemia without any evidence of gross bleeding from the gastro-intestinal tract or symptoms which inescapably direct attention to the stomach. At times what appears to be a simple gastric polyp actually may be malignant or may become malignant; therefore, when such a polyp is detected by roentgenologic or gastroscopic examination it should not be ignored merely because it is not considered responsible for symptoms. In many cases such polyps probably should be treated surgically when recognized. If for any reason operation is not performed, periodic subsequent examination by a competent roentgenologist is essential and operation should be performed if there is any growth or other appreciable change in the physical characteristics of the polyp. Failure to follow this practice may result in the development of an extensive gastric carcinoma before its presence is appreciated. In another group of cases in which cancer of the stomach may attain serious extent before its recognition, patients, usually of middle age or older, appear clinically to have organic disease perhaps because of loss of weight and strength, anemia, anorexia or other symptoms. All methods of clinical investigation, however, reveal only unimportant findings. We should insist that such individuals return in six weeks for reëxamination. At this time the true nature of the difficulty may be detected readily. If left to his own devices such a patient otherwise may not come back until a hopelessly inoperable condition has developed.

**Indications for Treatment**

After the diagnosis of gastric carcinoma has been established, what are the indications for treatment? First of all one always should keep in mind the hopeless prognosis if the growth is not removed. In other words, any chance of removing the lesion cannot be neglected and all patients should be given the benefit of exploration except in the presence of certain definite contraindications. Physical examination may reveal the presence of metastasis which makes operation futile. Most often this evidence is found in the left supraclavicular lymph node, the cul-de-sac of Douglas (as detected in digital examination of the rectum) or in the liver. Occasionally metastasis may be noted in the umbilicus or in inguinal or other lymph nodes. Only rarely does carcinoma of the stomach metastasize to the lung.

Roentgenologic examination of the stomach gives most valuable information regarding the local extent of the growth, its situation in the stomach and the likelihood of operability. The roentgenologist, in addition to detecting a gastric neoplasm, will often venture his opinion regarding operability of the lesion. Such an opinion by a competent roentgenologist is quite helpful to the surgeon and usually accurate. It is well to remember, however, that the roentgenologist is limited in his examination and obviously does not have the same opportunity of determining operability that is afforded the surgeon at the operating table. For this reason there will be a certain degree of error in the roentgenologist's opinion regarding operability, and it is important to keep this fact in mind so that we are not guided in deciding whether to advise exploration by the roentgenologist's report alone but by the clinical picture as a whole. In a recent study it was noted that gastric resection was accomplished in 48.1 per cent of cases in which exploration was performed with a roentgenologic diagnosis of an operable lesion. In addition, the growth was removed in 23.3 per cent of cases in which operation was performed after a roentgenologic opinion of doubtful operability was obtained. Of particular interest is the group of cases in which exploratory operation was performed despite the roentgenologist's belief that the lesion was inoperable, as in 14.3 per cent of these cases resection was achieved. This of course does not mean that gastric resection was performed in 14.3

per cent of all cases in which the roentgenologist diagnosed an inoperable lesion, as in by far the large majority of these cases the patients were not even subjected to an exploratory operation. In the relatively small group of cases in which an exploratory laparotomy was performed, however, the growth was removed in 14.3 per cent of cases. The important point in this regard is that in the absence of clinical evidence of inoperability the roentgenologist's interpretation of inoperability should not always be accepted as a definite contraindication to exploratory operation.

### Results

What results may be expected in the treatment of carcinoma of the stomach? If one is to determine accurately just what chance for cure the patient with carcinoma of the stomach actually has, he must first consider all cases in which the diagnosis is made, as emphasized by Livingston and Pack.[2] A recent study[7] revealed that the diagnosis of gastric carcinoma had been made in 10,890 cases at the Mayo Clinic from 1907 through 1938. During this period exploratory laparotomy was performed in fifty-seven of each 100 cases in which the diagnosis of gastric carcinoma was made. Gastric resection was performed in twenty-five of the fifty-seven cases in which operation was performed, and in the remainder exploratory laparotomy alone or some palliative operation was performed. As the average operative mortality rate for gastric resection during this period was 16 per cent, this means that only approximately twenty-one of the twenty-five patients who underwent resection (out of the original group of 100 cases in which the diagnosis of gastric carcinoma had been made) survived the operation and therefore had some chance of ultimate cure. A follow-up study revealed that 29 per cent of patients who underwent resection and survived the operation lived for five years or longer and 20 per cent lived for ten years or longer. This means (29 per cent of the twenty-one patients who had resection and survived the operation) that six of the 100 patients whose condition was diagnosed originally as cancer of the stomach lived for five years or longer and that four lived ten years or longer. During recent years the rates of operability and resectability of carcinoma of the stomach have been increased somewhat and consequently the ultimate cures correspondingly enhanced.

**It must be granted that these figures present a rather dismal prospect of cure for cancer of the stomach. Rather than having a discouraging effect, however, these data should stimulate us all the more to establish the diagnosis early in a greater number of cases so that more individuals can be afforded the possible benefits of resection. If considered only from the point of view of those patients who underwent resection and survived the operation it is seen that twenty-nine of each 100 patients survive for five years or longer and twenty live ten years or longer. Although this survival rate is comparable with that obtained in the treatment of malignant lesions in certain other parts of the body, obviously it leaves considerable to be desired. The important point to remember, however, is that the patient who presents himself with a resectable lesion has a far better chance of surviving five years after operation than does the average individual with carcinoma of the stomach.**

Study of the factors which influence end results when resection has been performed indicates that involvement of the regional lymph nodes and the grade of malignancy are two of the most important considerations. Thus 62 per cent of patients with grade 1 or 2 lesions lived for five years or longer whereas only 27 per cent of those with grade 3 or 4 lesions lived five years or more. Unfortunately, approximately 73 per cent of gastric carcinomas are either grade 3 or 4. When the regional lymph nodes have not been found to be involved 42.1 per cent of patients lived five years or more following operation; however, when involvement of lymph nodes was present only 17.2 per cent survived for this period of time. Extension of the growth to near or distant structures is another factor which influences ultimate prognosis. When this has occurred, even though the entire growth apparently is removed, ultimate results are slightly less favorable. Certain other factors such as location of the lesion in the stomach, presence or absence of free hydrochloric acid in the gastric contents, value for hemoglobin, and so forth appear to have minor influence on survival rate.

### Comment

In closing, I believe we should remember that the only hope for cure of gastric cancer resides in

recognition of the disease at a sufficiently early stage to permit its surgical removal. The means whereby this disease can be recognized, at this stage, when the opportunity is presented, are within the means of us all; namely, a carefully taken history, a clear appreciation of the symptoms which may be produced by early cancer in the stomach, and insistence on competent roentgenologic diagnosis of the stomach in any case in which gastric cancer is even faintly suspected. In addition, an accurate differential diagnosis of any gastric lesion which either may be or might become carcinomatous is essential. The benefit of exploratory laparotomy should be given to any patient who has gastric cancer, when there is even a small chance that the lesion might be removed, unless obvious metastasis already is present. Although the ultimate prognosis of gastric carcinoma is not bright, by increasing effort and diligence on the part of the medical profession it is hoped that end results gradually may be improved.

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# Effect of Oral Administration of Diethylstilbestrol on Menopausal Symptoms


**By J. William Peelen, M.D.**
**Kalamazoo, Michigan**

J. William Peelen, M.D.

*M.D., Rush Medical College, 1932. Member of the Staffs of Bronson Methodist, and Borgess Hospitals, Kalamazoo. Member, Michigan State Medical Society.*


■ The series of investigations begun by Dodds and his associates on the estrogenic activity of phenanthrene and dibenzanthracene compounds led to the synthesis in 1938 of the potent estrogenic substance, diethylstilbestrol.[2] The original observations of this group of workers, and many subsequent confirmations by others, have proved that this substance—though differing in chemical structure from the natural estrogens—possessed estrogenic activity equal to, if not more potent than, some of the natural estrogens. Unlike the natural estrogens, diethylstilbestrol loses little or none of its activity upon oral administration. When assayed by the Allen and Doisy method 1 mg. of diethylstilbestrol is equivalent to 25,000 international estrone units. Many clinical studies have confirmed its value as a hormone substitute, but many of the authors have doubted whether it was free from danger when given in therapeutically effective doses.

Diethylstilbestrol is well tolerated in animals without toxic effects, as are full estrogenic doses of the natural estrogens. Selye[8] showed that in mice and rats diethylstilbestrol—like estradiol—when given in very large doses produces acute and chronic toxicity. Both diethylstilbestrol and the natural estrogen, in doses that greatly exceeded the estrogenic dose, produced signs of acute toxicity marked by jaundice resulting from liver damage, kidney changes, and changes in other organs. Chronic toxicity was reflected in a considerable enlargement of the liver. Loeser,[3] experimenting with rats, noted loss of appetite, epistaxis, vaginal and intestinal hemorrhages, fatty degeneration of the liver with subsequent necrosis, enlargement of the adrenal glands with hyperemia and bleeding, and enlargement of the spleen with hemorrhagic changes in the islands.

Concerning the toxicity of diethylstilbestrol in

TABLE I. CLINICAL RESULTS

| Diagnosis | Dosage | Total Amount Administered | Duration of Treatment | Results | Toxic Reaction |
|---|---|---|---|---|---|
| 1. N. Menopause | 0.3 mg. | 10 mg. | 3 days | None | Nausea and Vomiting |
| 2. N. Menopause | 0.5 mg. every other day | 240 mg. | 10 mo. | Relief | None |
| 3. N. Menopause Senile Vaginitis | 1.0 mg. daily | 80 mg. | 7 mo. | Partial Relief | None |
| 4. N. Menopause | 0.5 mg. 4 times weekly | 14 mg. | 14 days | Relief | None |
| 5. Menstruating | 0.5 mg. 2-3 times weekly | 50 mg. | 6 mo. | Partial Relief | Slight nausea from large dosage |
| 6. N. Menopause | 0.5 mg. every other day | 550 mg. | 7 mo. | Partial Relief | None |
| 7. N. Menopause | 0.5 mg. every other day | 40 mg. | 7 mo. | Relief | None |
| 8. Menstruating | 0.5 mg. every other day | 64 mg. | 4 mo. | Relief | None |
| 9. N. Menopause | 0.5 mg. daily | 100 mg. | 6 mo. | Relief | None |
| 10. N. Menopause | 0.5 mg. daily | 58 mg. | 3 mo. | Relief | None |
| 11. N. Menopause | 0.5 mg. every other day | 32 mg. | 3 mo. | Relief | None |
| 12. N. Menopause | 0.5 mg. every other day | 60 mg. | 3 mo. | Relief | None |
| 13. N. Menopause | 0.5 mg. 3-5 times weekly | 30 mg. | 3 mo. | Partial Relief | None |
| 14. Menstruating | 0.5 mg. daily | 14 mg. | 2 mo. | None | None |
| 15. N. Menopause | 0.5 mg. 4-5 times weekly | 34 mg. | 2 mo. | Relief | None |
| 16. N. Menopause | 0.5 mg. every other day | 34 mg. | 2 mo. | Relief | None |
| 17. N. Menopause | 0.5 mg. daily | 34 mg. | 1 mo. | Relief | None |
| 18. S. Menopause | 0.5 mg. 5 times weekly | 210 mg. | 8 mo. | Relief | None |
| 19. S. Menopause | 0.5 mg. every other day | 60 mg. | 8 mo. | Relief | None |
| 20. S. Menopause | 0.5 mg. every other day | 100 mg. | 7½ mo. | Relief | Slight nausea if dose is increased |
| 21. S. Menopause | 0.5 mg. every three days | 62 mg. | 6½ mo. | Relief | Slight nausea if dose is increased |
| 22. S. Menopause | 0.5 mg. 5 times weekly | 140 mg. | 5½ mo. | Relief | None |
| 23. S. Menopause | 0.5 mg. every other day | 80 mg. | 5 mo. | Relief | None |
| 24. S. Menopause | 0.5 mg. every other day | 60 mg. | 5 mo. | Relief | None |
| 25. S. Menopause | 0.5 mg. daily | 15 mg. | 14 days | None | Nausea |
| 26. S. Menopause | 0.5 mg. every other day | 20 mg. | 1 mo. | Relief | None |
| 27. N. Menopause | 0.5 mg. every other day | 20 mg. | 1 mo. | Relief | None |
| 28. N. Menopause | 0.5 mg. every other day | 30 mg. | 1½ mo. | Relief | None |
| 29. N. Menopause | 0.5 mg. daily | 30 mg. | 1 mo. | Relief | None |
| 30. S. Menopause | 0.5 mg. every other day | 40 mg. | 1 mo. | Relief | None |

human beings, investigators have been disturbed mainly by the possibility of liver damage. However, no instances of severe toxic jaundice or deaths have been reported. Payne and Shelton[7] performed liver function tests on twenty-six patients and found all to be within normal limits, except one in whom hippuric acid secretion had been high before treatment. The symptoms of intoxication in this patient (scotomata, nausea, jaundice, and pruritus) promptly disappeared after treatment was discontinued. Kidney damage, indicated by the appearance of albumin and casts in the urine, was observed by Buxton and Engle[1] in one of their patients. The urinary findings returned to normal after the drug was withdrawn. MacBryde[4] and Sevringhaus[9] observed no evidence of damage to the liver, kidney or bone marrow. Mazer[5] stated that in ten patients of his series there occured no changes in weight, blood pressure, basal metabolic rate, urine, or blood.

As clinical experience in the use of this drug increased, it became apparent that the signs of intoxication that follow the administration of this drug are probably overdosage phenomena. In the early clinical studies in which the minimum daily dosage of 5.0 mg. recommended by the Therapeutic Trials Committee was used, as high as 80 per cent of the treated patients developed toxic symptoms. With the employment of smaller doses (average of 1.0 mg. daily) the incidence of intoxication was greatly reduced.

**The criteria used for evaluation of the therapeutic activity of diethylstilbestrol have been the relief of menopausal symptoms plus objective evidence as supplied by vaginal and endometrial biopsies, vaginal smears, and gonadotropic factor levels in the urine. Payne and Muckle,[6] relying upon subjective evidence alone—the relief of flushes—to gauge the therapeutic efficacy and dosage of the drug, showed**

**that lower dosages, ranging from 0.1 to 1.0 mg. of the drug daily, were sufficient to relieve the climacteric symptoms rapidly and efficiently in the majority of their patients. In prescribing medication for the relief of the distressing symptoms of the climacterium it is important to keep in mind the individual variations in the physiologic response to the drug and the glandular adjustment which is necessary for complete recovery from the menopausal syndrome.**

## Clinical Observations

The present study apparently confirms the findings of Payne and Muckle on the effectiveness of small doses of diethylstilbestrol, as determined by relief of menopausal symptoms. However, it does not support their contention that larger doses are required in artificially induced menopause than in the naturally occurring menopause. Diethylstilbestrol* was administered by mouth to a series of thirty patients (Table I) for periods varying from fourteen days to ten months. At the start of this investigation the initial dosage was 1.0 mg. daily. This dosage was reduced shortly afterward to 0.5 mg. daily. The latter dosage was prescribed for two weeks with instructions that the drug should be discontinued for one day, if nausea developed, and resumed the next day. The initial dosage was considered adequate when the menopausal flushes were held in abeyance. This result usually was obtained within one week. Maintenance dosage was then determined, and in most instances was found to vary from three to seven 0.5 mg. capsules weekly. No consistent differences in the maintenance dosage in surgical and natural menopause were noted. One patient who received only two weeks of treatment remains free from symptoms at the time of this writing, six months later. The largest total amount of the drug given to any one patient was 240 mg. The patient who was given this amount over a period of ten months did not develop any signs of intoxication.

Among the patients included in this series was one with senile vaginitis who experienced relief from hot flushes on a dosage of 0.5 mg. of diethylstilbestrol daily. However, no improvement in vaginitis occurred until the dosage was increased. On a dosage of 1.0 mg. daily for 10 days mature cornified epithelial cells appeared in the vaginal mucosa, and the inflammation subsided. In three other cases not included in this report this larger dosage was necessary to produce objective signs of estrogenic effect as determined by vaginal smears. Although the number of observations are too few to warrant the drawing of definite conclusions, they justify the postulate that small amounts of the drug are sufficient for symptomatic relief. When estrogenic effect on the tissues is desired, however, larger doses are required.

## Toxic Effects

Two of the thirty patients were unable to take the drug because of nausea and vomiting. These manifestations appear soon after ingestion of the drug, and disappeared within twenty-four hours after its discontinuation. The nausea and vomiting promptly reappeared when diethylstilbestrol was again administered. Three patients experienced slight nausea when diethylstilbestrol was given daily; reduction of dosage to 0.5 mg. two to four times weekly relieved the flushes without the appearance of nausea. One patient developed headaches when taking 0.5 mg. of diethylstilbestrol daily, but had no difficulty when the same amount was taken on alternate days. On this lower dosage the patient continued to remain almost completely free from her previous menopausal symptoms. Vaginal bleeding was not observed with the doses of diethylstilbestrol used in this study. In some of the patients the drug exerted a mild laxative effect.

## Summary and Conclusions

Adequate therapeutic effect in the majority of menopausal patients can be obtained from small doses of diethylstilbestrol, equivalent to 0.5 mg. three to seven times weekly. The clinical results are similar to those following the administration of the natural estrogens. Nausea and vomiting appeared in about seven per cent of the series of thirty patients treated. These side effects disappeared promptly upon discontinuance of the drug. Small doses of diethylstilbestrol will produce satisfactory relief of symptoms in most of the menopausal patients; but when histologic evidence of estrogenic effect is needed, as

*Diethylstilbestrol used in this investigation was supplied through the courtesy of the Medical Division of the Upjohn Company, Kalamazoo, Michigan.

in senile vaginitis, larger doses of about 1.0 mg. daily appear to be required.

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MSMS

# The Modern Treatment of Traumatic Shock*


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■ The recent impetus to the study of shock has been more or less promulgated by the advent of World War II; however, important observations and deductions were elicited during World War I. A number of investigators[5,7,8,11,14,15,16,19,28] formulated a basis for future studies regarding the mechanism and treatment of shock. Due credit must be given to the various British, Canadian, and American scientists who have brought forth certain observations which have helped to clarify some of the various mechanisms concerned in the mechanism of shock.

Blalock[2] states "shock is an all inclusive term which denotes a disturbance in the circulation that is characterized by a diminution in the venous return of blood to the heart. This holds true, in general, because the heart itself is not at fault and is able to propel the blood that returns to it. The diminution in the venous return usually results from a decrease in the ratio of the volume of blood in circulation to the capacity of the vascular tree, due to a decrease in the volume of circulating blood or to an increase in the capacity of the vascular bed or both." From this statement one gathers that the relative expansion and decrease of the peripheral vascular bed is due to certain toxic factors which disturb the relative tonus of the more or less elastic osmotic mechanisms which tend to maintain certain normal relationships between the circulating blood volume and the peripheral vascular and tissue spaces.

Cowell[9] reëmphasizes the fact that wound shock is a condition of failure of the circulation in that failure of the circulation gives rise to a drop in blood pressure, reduction of the body temperature, diminution of the blood volume and concentration of the blood, intracellular anoxemia, and, in untreated cases, subsequent death.

Cressman and Blalock[10] state that all cases of shock are not referable to one etiology and various classifications have been devised to distinguish them. Thus primary and secondary shock have long been used. Primary shock refers to the immediate collapse following injury as contrasted with secondary shock which comes on after a variable interval following the trauma.

Primary shock has usually been interpreted as the immediate reaction of the nervous system to trauma, similar to ordinary syncope, initiated by a peripheral vasodilation, probably in the splanchnic area with a sudden fall in blood pressure, leading to unconsciousness. Primary shock often merges imperceptibly into secondary shock. Blalock[3] has suggested a physiologic classification on the basis of acute circulatory failure, the different types being designated as hematogenic, neurogenic, and vasogenic. Hematogenic refers to those instances in which there is an initial decrease in the blood volume which is followed by a compensatory vasoconstriction and a decrease in the output of the heart and subsequently by a decline in the blood pressure. The conditions associated with simple hemorrhage and trauma to the muscles are examples of this type. The neurogenic type is associated with vasodilation which is dependent on diminished constrictor tone as a result of influences acting through the nervous system. The blood pressure declines first and subsequently there is decrease in the blood volume and the cardiac output. The vasogenic type is associated with vasodilation which is produced by agencies which act directly on the blood vessels and capillaries; histamine probably

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CLASSIFICATION OF SHOCK

| Type | Cause | Pathologic Physiology |
|---|---|---|
| Hematogenic Secondary Shock Gravis Type | 1. Hemorrhage<br>2. Excessive Trauma<br>3. Burns<br>4. Difficult Obstetrical Labor | Tissue response to excessive trauma "Blalock" (Hemoconcentration or dilution depending on relative losses of whole blood and plasma)<br>Injury to tissues — Local loss of whole blood and plasma — Decrease in blood volume and blood flow to tissues — Decrease venous return and cardiac output<br>Vasoconstrictions, Decrease blood pressure } Further decrease blood volume — Vasodilatation<br>Tissue anoxia — General capillary dilatation and increase in permeability |
| Neurogenic<br>Primary Shock (Syncope) | 1. Trauma to Viscera<br>2. Spinal Anesthesia<br>3. Postural Hypotension<br>4. Carotid Sinus Irritability | 1. Trauma to mesentery causes a general decrease in vascular tone and reflex inhibition of the heart through the vagus nerve.<br>2. Primary alteration is vasodilation on diminished constrictor tone as a result of influences acting through the nervous system. |
| Vasogenic | 1. Histamine<br>2. Nitrites<br>3. Addison's Disease | Direct action of toxic agencies on blood vessels. |

exerts most of its effects in this manner. Unfortunately, no one type of shock is usually present, since the interrelationship of the various types is due to a vicious cycle set up by the toxic or noxious factors present.

Grodins and Freeman[13] state that the following changes in the blood and circulation are generally agreed upon as occurring in traumatic shock:

1. Capillary stagnation, which leads to reduction of the effective blood volume (oligemia), as evidenced by:
   a. Hemoconcentration.
   b. A decrease in venous return to the heart with a resulting reduction in cardiac output.
   c. A decrease in circulating blood volume by exemia.
2. Decreased tone of skeletal muscles, decreased arterial pressure, collapsed veins, and depressed respiration.
3. Anoxemia.
4. Decrease in the alkali reserve (sodium bicarbonate) of the blood (acarbia).
5. Partial compensation for the tendency to acidosis by a reduction in the carbonic-acid content of the blood (acapnia).
6. An actual decrease in the pH of the blood (acidemia or hyperhydria), which results because of the fact that there is only partial compensation for the acidosis.
7. A rise in the plasma potassium, which is interpreted as an indication of a disturbance in cell permeability.

Moon[18] states that circulatory failure of capillary origin results from a disparity between the volume of blood and the volume capacity of the vascular system. That disparity results from the reciprocal effects of two major factors, capillary atony, and tissue anoxia. Either of these factors will cause development of the other, and this reciprocal reaction gives the circulatory deficiency a self-perpetuating quality which tends toward an irreversible condition. This tendency toward irreversibility requires early recognition and action, and early studies will reveal hemoconcentration. The circulatory deficiency which results from capillary atony is accompanied by a group of characteristic visceral pathologic changes. These are capillo-venous congestion in the thoracic and abdominal viscera, edema of the soft tissue (such as lungs and mucosa) effusion into serous cavities, and petechial hemorrhage in parenchymatous organs, in serous and in mucous surfaces.

Cannon[6] states that a prolonged low blood pressure is attended by a deficient supply of oxygen to the tissues; undoubtedly nerve cells are peculiarly sensitive to a lack of oxygen, and therefore persistence of the state of shock may result ultimately in the loss of vasomotor tone, with resultant exhaustion of the nerve cells due to a relative anemia.

Selye, Dosne, Basset, and Whittaker[24] observed that animals exposed to various damaging agents responded with a syndrome of an "alarm reaction," and that this alarm reaction consists of two phases; the first of which is the phase of shock, characterized by loss of muscular tone, decrease in body temperature, decrease in blood volume with transudation of plasma into the tissue spaces, anuria, a rapid fall in blood chlorides and often also in blood sugar, hemorrhages into the gastro-intestinal tract, and other changes, all of which are generally accepted as typical of shock. During this stage the organism is obviously damaged and many experimental animals die. The duration of this shock phase depends on the severity of the agent used and on the resistance of the animal, and varies between one and thirty-six hours in the rat.

Immediately following this stage an entirely different set of symptoms appear which might descriptively be referred to as "countershock." During this second phase the most outstanding morphological changes are marked enlargement of the adrenal cortex, severe atrophy of the thymus and to a lesser degree of other lymphatic organs. Most of the changes characteristic of shock have not only disappeared but are actually reversed during the countershock period. Thus the blood chlorides and the blood volume tend to rise above normal, diuresis is excessive, and the temperature rises. Since adrenalectomized animals are unable to develop a clear-cut countershock response and at the same time show a very low resistance against damaging agents, and since the adrenals reveal obvious signs of increased activity, especially during the countershock phase of the alarm reaction, they concluded that the adrenals play an important role in shock defense.

Their investigations in the rat indicated however that in traumatic shock the adrenals always show characteristic changes. The cortical cells discharge their lipid granules (probably the carriers of the cortical hormones) and become greatly enlarged. Mitotic proliferation of these cells is likewise not uncommon, and as a result of these changes the weight and size of the glands are greatly increased. The adrenal medulla loses its chromaffin granules, which is taken to indicate that it discharges adrenalin into the blood. These changes were observed following all types of surgical injuries, such as excessive muscular excercise, exposure to cold, or treatment with toxic doses of various drugs, the adrenals show the same histologic changes as are seen in cases of trauma. Following all these injuries the more the adrenals enlarge, the more pronounced is the thymus involution. This led them to conclude that excessive adrenal activity and thymus involution are both parts of the same general defense reaction against damage, namely, the "alarm reaction." The fact that in adrenalectomized animals, which develop all other signs of shock very readily, the thymus fails to involute during exposure to stress and strain gave further support to their contention that the adrenal enlargement and the thymus atrophy are countershock phenomena. The question arose, however, what part of the adrenal is essential for shock defense? Cannon's well known work on the emergency secretion of adrenalin during exposure to damage made it rather likely that this hormone is the one which is primarily involved in countershock phenonema. Certain other facts known at that time pointed in the same direction. Thus Kellaway and Cowell noted that in adrenalectomized cats, which are very sensitive to histamine, resistance against this compound is greatly improved by adrenalin administration. However, as Selye *et al.* have shown, overdosage with adrenalin will initiate a subsequent shock state and lethal doses of adrenalin fail to cause thymus involution in the adrenalectomized rat, while cortin given in sufficiently large doses is effective in this respect. It is further observed that the toxic effects of adrenalin are counteracted by cortin in the adrenalectomized rat. These experiments confirmed their belief that it is primarily an increased adrenal cortical secretion which is responsible for the development of resistance in the countershock phase.

They also showed that cortin antagonized both insulin hypo-glycemia and adrenalin hyperglycemia in the rat which furnished another proof that cortical hormone acts as a "stabilizer" of metabolic processes even in the non-adrenalectomized animal.

The fact that cortical hormone therapy exerts beneficial effects in so many different conditions makes it rather likely that the hormone is not a specific antidote in any one of these cases but

raises shock resistance in general because a condition of relative "adrenal insufficiency" exists in organisms exposed to nonspecific damage. The clinical observations concerning the curative action of cortin in surgical shock likewise appeared to point in this direction, but in patients suffering from shock cortin has so far never been used without the simultaneous administration of other therapeutic agents, and no animal experiments have yet been published on the action of cortin in surgical shock.

### Treatment

From the above review of current literature it is quite obvious that the treatment of traumatic shock resolves itself into a rectification of the disturbances which are associated with a profound vasomotor and cellular disfunction, namely: hemoconcentration, anoxemia, acarbia, acapnia, and oligemia.

Minot and Blalock[17] state that the transfusion of blood plasma is probably the method of choice for the restoration of plasma volume. The use of plasma rather than whole blood avoids further burdening of the circulation with cellular elements which are already present in high concentration. Volume for volume plasma transfusions introduce protein approximately twice as fast as when whole blood is given.

Scudder,[23] Swingle, Parkins, Taylor, Hays,[25] Reed[21] and Corrado[12] have shown that the mere replacement of glucose and electrolytes in traumatic shock is ineffective in controlling the morbid symptomatology unless massive doses of adrenal cortex hormone are given intravenously, subcutaneously, and in certain cases orally. The adrenal cortex homone seems to be essential in stabilizing not only the electrolytes but also in maintaining the normal oncotic relationship between the carbohydrates and proteins of the tissue spaces.

Reed[22] calls attention to the fact that serum potassium is elevated during shock and that this increase is proportionate to the severity of the shocked condition of the patient; this fact being previously emphasized by Scudder. He further shows that the administration of adrenal cortex hormone is helpful in controlling the coagulability of the blood.

Ravdin[20] showed that in the presence of hypoproteinemia attempts to restore a normal fluid and electrolyte balance without at the same time increasing the colloid osmotic pressure by adding to the plasma protein too frequently results in adding to the extravascular fluid reserves. Therefore, it would seem logical to summarize the various beneficial effects of plasma transfusion at this time as a corrective measure in overcoming hypoproteinemia and hemoconcentration.

Silverman[25] and Katz[26] have beautifully summarized the indications for plasma transfusion and state that plasma besides being given intravenously can be given per hypodermoclysis and intramuscularly when the condition of the patient is such that the accessible veins cannot be readily reached, and that the rate of absorption is an individual matter but roughly approximates that of physiological saline.

### Physiological Properties of Plasma

Plasma is essentially the liquid portion of blood separated without clotting, while serum is the liquid portion remaining after clotting has taken place. Plasma may be considered a liquid solution of three important proteins, albumin, globulin, and fibrinogen. The total protein content of normal plasma may vary from 6.5 to 8.5 Gm. per 100 c.c.

Plasma is the ideal physiological fluid for the maintenance of blood volume. The red blood cells abstracted from the plasma are in no way effectual in exerting any colloid osmotic pressure. This is the function of the plasma proteins, and it is this property which makes possible the usefulness of stored plasma in those emergencies where blood pressures have fallen to a dangerous state. The fleeting effects of the electrolytes, glucose, and adrenalin as measures of overcoming shock are well known.

The hemostatic effect of citrated plasma probably resides in its several protein fractions, fibrinogen, platelets, and prothrombin content.

### Types of Available Plasma

At present there are two types of plasma being used, the wet and the dry. Wet plasma is defined as the liquid plasma separated from unclotted blood and is either unmodified or diluted with saline or glucose. By dry plasma is meant plasma which has been subjected to various drying procedures and finally put up as a powder for ultimate regeneration with distilled water when needed.

### Medical Indications For Plasma

**A. Gastro-intestinal Conditions**
1. Nutritional edema and hypoproteinemias
   (a) Exogenous
   (b) Endogenous
2. Hemorrhagic gastro-intestinal states
   (a) Hemorrhagic gastritis
   (b) Bleeding gastric or duodenal ulcer
   (c) Ulcerative lesions of the large intestine.
3. Postoperative obstruction complicating gastric surgery
4. Infections
   (a) Bacillary dysentery
   (b) Peritonitis following a ruptured viscus

**B. Nephritic and Nephrotic States.**
1. Anurias

**C. Cardiac States**

### Surgical Indications For Plasma

**A. Shock.**
1. Primary
2. Secondary

**B. Dehydration**
**C. Burns**
**D. Wound healing and wound disruption**
**E. Increased intracranial pressure**
**F. Postoperative pulmonary atelectasis and edema**
**G. Pre-anesthetic preparation of bad risk liver**

To determine from a therapeutic standpoint whether blood plasma or salt is indicated, three fundamental procedures must be carried out:

1. The determination of the number of red blood cells per c.mm.
2. The relative volume as determined by the hematocrit. This is obtained by centrifuging a constant quantity of blood to a constant volume and calculating the ratio of the volume of packed cells to plasma. The hematocrit in men varies between 43 to 50 per cent, and in women from 38 to 43 per cent.
3. Estimation of the total blood proteins is made through an indirect method of determining the specific gravity of the blood plasma.

Wherever possible the above information should be elicited as a guide to therapy; with constant repetition until the patient is in normal balance.

### Oxygen Therapy In The Treatment Of Shock

As has been shown in the preceding discussion, anoxia is one of the most important symptoms of the deficiency state seen in traumatic shock, and as Aub and Cunningham[1] have shown, traumatic shock causes a marked slowing of the blood flow and a marked decrease in the oxygen content of the venous blood from an average of 12.3 volumes per cent to 4.8 vols. per cent. There is an associated reduction of the oxygen content in the arterial blood from an average of 17.2 vol. per cent to 12.8 vol. per cent. Boothby, Mayo, and Lovelace[4] have shown that the inhalation of oxygen not only results in an increase in the oxygen in chemical combination with hemoglobin, but in a substantial increase in the amount of oxygen in physical solution in the blood plasma. They show that:

"The amount of oxygen in 100 c.c. of arterial blood of the average normal individual will be increased from 19.5 c.c. when the individual is inhaling air to 22.2 c.c. when he is inhaling 100 per cent oxygen. That is, there will be an increase from 10 to 15 per cent in the oxygen content of the arterial blood. At first thought, this 10 to 15 per cent increase appears to be comparatively small and possibly negligible. That this increase is not immaterial, however, depends on another factor; namely, the rate at which the blood is circulating through the tissues. The blood as it passes through the capillaries gives up to the tissues, under normal circulatory conditions, only about 40 per cent of its load of oxygen; the venous blood, therefore, is still about 60 per cent saturated, and the average partial pressure of oxygen in the capillaries will correspond to approximately 35 mm. of mercury (effect of carbon dioxide neglected). If for any reason the rate of circulation is decreased, as occurs for example in shock, the blood may give up as much as, or even more than, 80 per cent of its load of oxygen as it passes slowly through the capillaries; therefore, the venous blood is only 20 per cent saturated and will exert a pressure equivalent to approximately 14 mm. instead of 35 mm. of mercury. Now, if nothing else is done but to cause the patient to inspire 100 per cent oxygen, instead of the 21 per cent of oxygen contained in the air, the arterial blood which leaves the lungs will contain, as has been shown, 2.2 c.c. more oxygen per 100 c.c. In consequence the capillary and venous blood which leaves the lungs will contain from 10 to 15 per cent more and will be 33 per cent saturated instead of 20 per cent saturated. There will be a corresponding increase in the partial pressure of oxygen in the capillaries, from 14 to 21 mm., which is the equivalent of a 50 per cent increase in the pressure of oxygen in the tissues."

These authors also point out the role of a moderate elevation of the body temperature in increasing the arterial oxygen content.*

### Summary and Conclusion

In recapitulation of the pathological physiology that is present when a state of traumatic shock ensues, hemoconcentration, tissue anoxia and hypoproteinemia associated with degenerative changes in the suprarenal glands both in the cortex and the medulla are the paramount dis-

*Since this paper was presented Schnedorf and Orr[27] have re-emphasized that the inhalation of a high concentration of oxygen is indicated in the treatment of traumatic shock.

turbances which must be rectified before irreversible changes occur.

1. The immediate administration of the adrenal cortex hormone intravenously or subcutaneously should be started as soon as the patient is admitted to the receiving room and not one-half hour or an hour later after the patient has been admitted to the surgical service, where if it is necessary the dose may be repeated. (Compound dosage of adrenal cortex hormone is usually necessary.)

2. The practical advantages of plasma over whole blood transfusions in the treatment of traumatic shock are:

(a) There is no need to type the patient. Time is therefore saved and the plasma can be actually running into the vein within five minutes of the patient's admission to the hospital.

(b) The plasma can be kept in liquid form for long periods without deterioration.

(c) There is no need for elaborate refrigeration.

(d) Plasma is equally effective in the treatment of transfusions for hemorrhage as whole blood is. The loss of red cells from the body is unimportant unless it is accompanied by sufficient loss of plasma to reduce the blood volume.

3. Administration of high concentrations of oxygen to overcome the tissue anoxia should be started as soon as the patient is admitted in the state of shock.

4. The application of external heat to conserve the body temperature is essential since most patients admitted in traumatic shock have a vasoconstrictor type of circulatory failure.

5. The intelligent use of the stimulating and pain relieving drugs is very essential and herewith are listed the therapeutic armamentarium available in the treament of the various phases of traumatic shock:

(a) For the type of peripheral circulatory failure in which vasodilation is an early prominent feature the use of a number of vasoconstrictor drugs has been recommended; among those which have been recommended are: epinephrine, ephedrine, caffeine, neosynephrin hydrochloride, ether, strychnine, coramine, cardiazol benzedrine, pitressin, paredrin, paredrinol, camphor.

(b) Morphine is excellent for the prevention or the relief of pain and restlessness, and contraindicated where intracranial injuries are suspected.

(c) Papaverine hydrochloride, spasmalgen, and insulin-free pancreatic extracts may be used where the prominent feature of the peripheral circulatory failure is vasoconstriction.

6. The modern treatment of shock is therefore limited to the introduction into the body of a metabolic stabilizer; namely, adrenal cortex hormone, and the reëstablishment of the osmotic pressure disturbances in the tissues by the administration of plasma and oxygen.

## Addendum

Recently Henry N. Harkins in an article entitled: "Treatment of Shock in War Time," [War Medicine, 1:520-535, (July) 1941] reëmphasized that shock is a progressive vaso-constrictive eligemic anoxia and that treatment resolves around this definition.

Due to the limited amounts of plasma available and the prohibitive cost to the patient at times, various substitutes are being used with the same beneficial effects as those exerted by blood plasma, namely the use of 0.5 per cent pure pectin solution [Hartman, F. W.; Schelling, Victor; Harkins, Henry N.; Brush, B.: Pectin solution as a blood substitute. Ann. Surg., 114: 212-225, (Aug.) 1941] and isinglass or fish gelatin which is prepared from the sounds or swimming bladders of various species (sturgeon, hake, sea trout, et cetera) [Taylor, N. B., and Waters, E. T.: Isinglass as a transfusion fluid in hemorrhage. Canadian Med Jour., 44:547-554, (June) 1941].—The Author.

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*(Continued on Page 888)*

# End-to-End Anastomosis

## Mathematical Approach to the Causes of the Marginal Gangrene

By Arthur H. Mollmann, M.D.
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■ The success of an end-to-end intestinal anastomosis is dependent upon asepsis, adequate blood supply, and a smooth approximation of the serosa.

A disastrous marginal gangrene in the suture line of an end-to-end anastomosis prefers in most cases the contramesenterial area. Concerning the causes of gangrene, pathologists generally classify defective blood supply as the first, and bacterial toxins as the second factor of importance. While it has long been known, that the difficulties of maintaining asepsis in surgery upon the intestinal tract run parallel with the abundance of putrefactive bacteria, and therefore increase greatly towards the large bowel and the rectum, the question of blood supply deserves special consideration in the development of a marginal gangrene.

**A mathematical analysis is proposed giving evidence of undue tension of the suture line in the contramesenterial area as a necessary result of our usual technique of end-to-end anastomosis, leading to a localized anemia in that portion of the suture line, where most of the marginal gangrenes are observed. At the end of the mathematical analysis two methods are offered to remedy the situation.**

Anatomical considerations are the basis of the usual technique of anastomosis. The arteries in the intestinal wall take their origin from the mesenterial arcades and run perpendicular to the line of mesenterial attachment and parallel to each other around the lumen in such a manner that only very fine branches and capillary anastomoses are found on the contramesenterial area and between the parallel arteries. Therefore a longitudinal incision exactly in the contramesenterial line does not bleed, and an exact transverse incision bleeds very little. In the large intestine this vascular pattern is complicated by the fact that the arteries in the relaxed bowel wall form loops in the appendices epiploicæ which are very easily caught by the sutures (Fig. 1).

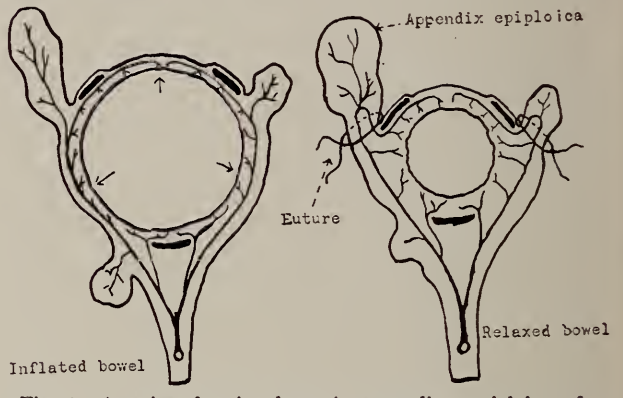



Fig. 1. Arteries, forming loops in appendices epiploicæ of relaxed large bowel, easily caught by sutures. (Courtesy Prof. Schmieden: Surgical Technique.)

These considerations are the main reason for cutting the bowel not exactly transverse, but at an oblique angle, so that an accurately placed suture line cannot obstruct the main arteries feeding the contramesenterial area. In spite of this precaution a marginal gangrene in most cases prefers the contramesenterial area. It is occasionally observed in small bowel anastomosis but much more frequently in the case of large bowel anastomosis. An interference with the arterial loops in the appendices epiploicæ by the suture line does by no means explain all marginal gangrenes in the large bowel, because these loops may be found in good shape.

Therefore the following explanation is offered. It is a peculiar physical fact that a round tube—as for instance the human intestine—which between clamps in a flattened condition has been divided by a straight but oblique cut, will not find its cut surface in a mathematical plane but in an "S" shaped or hypoid curve, after the tube has been permitted to take its original round form (Fig. 2). This "S" shaped curve may be easily demonstrated by cutting a paper tube in the described manner and viewing the cut surface from the side.

It appears that this hypoid curve is of more than academic interest to the surgeon because

he usually does not anticipate the degree of "skewness" of the curve, when he cuts the flattened bowel in the described manner. That is from the mesenteric attachment to the contramesenteric border in a straight but oblique line, removing more tissue from the contramesenteric area, with the view of securing an adequate blood supply to the cut surface and of decreasing the stenosing effect of the suture technique which

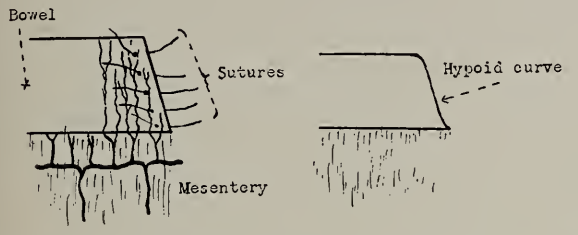
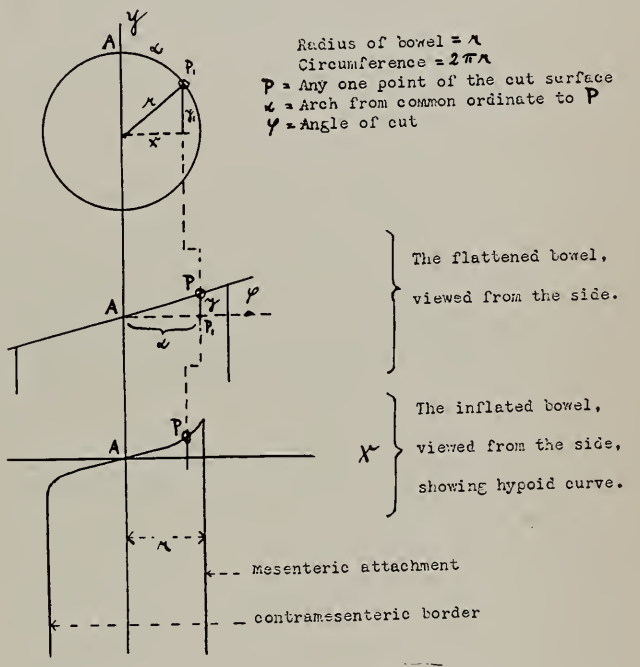



Fig. 2. *(Left)* Flattened bowel, cut at angle of 15 degrees. *(Right)* Rounded bowel, showing hypoid curve.

folds the entire cut surface inward at least 5 mm all around. During the time that the bowel contents are permitted to expand the lumen to its normal round shape, the hypoid curve develops along the suture line, which of course expresses itself as tension in the contramesenterial area due to the elasticity of the bowel wall. Near the mesenteric attachment the reverse process takes place, the cut surfaces being pushed together with the same force. With an average diameter of small intestine of 30 mm. and an oblique cut of about 75° (15° less than a transverse cut) the hypoid curve develops a tension in the contramesenteric area which is equivalent to the tension of a gap of 4.6 mm. width. An oblique cut of 70° produces a gap of 6.2 mm. With an average diameter of 50 mm. in the case of large bowel and an oblique cut of only 80° (10° less than transverse) a gap of 5 mm. width develops.

Obviously the tension in the suture line approximating the contramesenteric serosa surfaces is greater than in any other portion of the suture line, though all sutures may have been laid with exactly the same tension. Merely rounding out the lumen of the bowel without any particular gas pressure is responsible for the hypoid curve. But as the gas pressure becomes excessive, the disproportion between the tension in the contramesenteric area and the tension in the rest of the suture line increases greatly. The elasticity of the bowel wall in the contramesenteric area becomes exhausted, and the excessive gas pressure will tend to straighten out the angulation of the bowel at the point of anastomosis in the same manner, as for instance water pressure will straighten out a kinked garden hose. Therefore the maximum tension always will be found in the contramesenteric area, resulting in interference with the blood supply. Since only small arteries and mostly capillaries are found in this area, the blood pressure there is correspondingly lower and the flow more easily interfered with. For these reasons the rather mathematical hypoid curve may well serve as one of the factors in the development of marginal gangrene. It explains the preference of the marginal gangrene for the contramesenterial area in the absence of other adequate causes.

The mathematical evidence of the foregoing statements may be analyzed as follows:




$$x^2 + y_1^2 = r^2 \qquad tg\,\varphi = \frac{y}{\alpha}$$

$$\sin\left(\frac{\pi r}{2} - \alpha\right) = y_1$$

$$x^2 + \sin^2\left(\frac{\pi r}{2} - \alpha\right) = r^2$$

$$x^2 + \sin^2\left(\frac{\pi r}{2} - \frac{y}{tg\,\varphi}\right) = r^2$$

$$x = \pm\sqrt{r^2 - \sin^2\left(\frac{\pi r}{2} - \frac{y}{tg\,\varphi}\right)}$$

This formula proves that the cut surface of the inflated bowel does not lie in a plane, but in a curve which is symmetrical to the given ordinate. The character of the curve may be analyzed by the first derivative.

$$\frac{dy}{dx} = \frac{tg\,\varphi\sqrt{r^2 - \sin^2\left(\frac{\pi r}{2} - \frac{y}{tg\,\varphi}\right)}}{\sin\left(\frac{\pi r}{2} - \frac{y}{tg\,\varphi}\right)\cdot\cos\left(\frac{\pi r}{2} - \frac{y}{tg\,\varphi}\right)}$$

At the contramesenteric border the variables take the value

$$x = r \text{ and } y = \frac{\pi r}{2} \operatorname{tg} \varphi$$

while the tangent takes the value $\frac{dx}{dy} = \text{infinity}$.

Therefore, the tangent becomes parallel to the contramesenteric border, proving the hypoid character of the curve.

The turning point of the curve does not need to be determined by equating the second derivative to zero, because its coincidence with the y axis is too evident. The tangent in the turning point of the curve is arrived at by

$$y \text{ (limes} = 0) \text{ and } \frac{dy}{dx} = \operatorname{tg} \varphi$$

This tangent meets the mesenteric or contramesenteric line of the inflated bowel at $r \operatorname{tg} \varphi$. Therefore, the gaping (or tension) between two obliquely cut bowel lumina at the contramesenteric line will be twice

$$\left(\frac{\pi r}{2} \operatorname{tg} \varphi - r \operatorname{tg} \varphi\right)$$

or $$r \operatorname{tg} \varphi (\pi - 2) = 1.14\, r \operatorname{tg} \varphi$$

Examples:

r of small bowel = 15mm, $\varphi = 15°$, gap = 4.6mm
r of small bowel = 15mm, $\varphi = 20°$, gap = 6.2mm
r of large bowel = 25mm, $\varphi = 10°$, gap = 5mm

### Conclusion

This mathematical analysis also makes available two methods to remedy the effect of the hypoid curve. The one is to cut the flattened bowel, as usual, in a straight but oblique line from the mesenterial attachment to a point about 1 cm. to 1.8 cm. from the contramesenteric border, from this point the line curves rather suddenly to an almost transverse direction (Fig. 3).

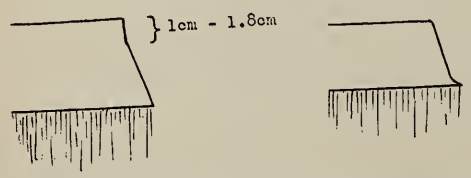



Fig. 3. *(Left)* Flattened bowel, cut by suggested curve. *(Right)* Rounded bowel, hypoid curve does not develop in contramesenterial area.

The distance of 1 cm. to 1.8 cm. is an average and has been calculated from the hypoid curve, and depends mainly from the diameter of the bowel. An accurately placed suture line will not be able to obstruct the main arteries feeding the contramesenterial area, the stenosing effect of the suture line will be decreased, no hypoid curve and no gap will occur at the contramesenterial area, and near the mesenteric attachment the cut surfaces will be pushed together. Evidently the suture technique of a curved surface can be solved readily by the "open technique of anastomosis." The different devices of "aseptic anastomosis" cannot be readily applied, though they are not impossible.

The second method calls for a decompression of that portion of the bowel that has been anastomosed. The hypoid curve cannot develop and cannot do any harm, as long as the bowel tube is not rounded out by the pressure of its contents.

MSMS

# Experiences in Premarital Council in Private Practice

**By Richard N. Pierson, M.D.**
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■ The purpose of this paper is to give in broad outline the general point of view that I have acquired from my efforts to meet the increasing demand for premarital examination and advice in private practice. It is doubtless your experience, as it is mine, that the demand for this service has increased markedly in the last ten years. Thus I share with you the many doubts and difficulties that I have experienced in these efforts, rather than give you statistical analyses of case histories, and well established conclusions as to the precise manner in which these problems should be handled, and the exact techniques that should be observed in their treatment.

I have had the good fortune for several years of belonging to a round table group of specialists in various fields of medicine, together with nonmedical students of the problem, organized under the National Committee on Maternal Health with

the guidance and direction of Dr. Robert L. Dickinson and Dr. Raymond Squier. This group has met regularly throughout the winter months, and we have had the advantage of discussing informally many of the problems that have to do with marriage relationships. My reaction to these meetings, my experiences in practice, and my study of the now rather voluminous literature, have all combined to impress me with the importance of the problem, with our lack of satisfactory knowledge about it, and, as one would expect, under these circumstances, the somewhat uncertain and unsatisfactory results obtained in handling these cases.

After all, our medical experiences in this field of medicine have been of short duration. The first courses on marriage were started at the University of North Carolina at the request of the students in 1924, under President Henry W. Chase and Professor Ernest R. Groves. I can give you no better perspective on the problem than to quote from the preface of Professor Groves' book, "Marriage." In describing the origin of these courses at the University of N. C. he says:

"The course has not been a series of popular lectures but a serious study of marriage in all its aspects. The content of the course has not only reflected the needs and desire of the students year by year, but also the reactions and suggestions of those who have taken it and have later married. If it were within the power of parents and teachers to retard sex maturity until the individual was both economically and biologically prepared to marry, there would be less need of a college course attempting to anticipate domestic experience. Nature, however, has given us no choice, and there is no possible barrier to sex interest which any educational organization can erect for the shelter of its youth. The policy that attempts this is incompatible with the prevailing conditions of modern life and merely means surrendering the opportunity for constructive, wholesome instruction, leaving the young man and woman to draw information from those who, however sophisticated and confident, are fundamentally as ignorant as their pupils. . . . Even in discussing matters that are not at present controversial, an attempt has been made to impress upon the student the rapidity with which new knowledge is appearing, and the tentative character of many of our present ideas relating to the marriage adjustment. Anyone who has become familiar with the literature concerned with marriage and sex problems, realizes how recent and how faint and elementary has been the attempt of science to understand these supremely important phases of human experience."

I am sure that your experience agrees with mine, that the doctors' problem is made difficult because the young men and women who come to us for premarital examination and advice are too often unready for marriage, both from the point of view of education and of character. This is the fault of all of us as parents, and of the educational programs of our schools and colleges that are only just beginning to follow the lead of men like Professor Groves. Because this whole educational problem seems to me so important for us doctors to understand, I wish to quote from a paper entitled "A Coöperative Project in Marriage Counseling" by Emily H. Mudd, director of the Marriage Council of Philadelphia and Bernice Lundein, Secretary. This appeared in the August number of *Human Fertility*.

"We may grant that there are limitations to any educational process in which the individual is attempting to learn about facts and attitudes which have strong emotional content, and in which he has, as yet, had little experience. May we also grant, however, the power of knowledge and of talking things over with someone who has lived these experiences, to lesson fears implanted by false information and ignorance? It is through this last mentioned process, in the opinion of some of us, that courses on marriage and family relationship can best meet the need of those who take them."

The course developed by Dr. Mudd and her associates comprises a six weeks' course of five lectures.

It is important to point out that the course of lectures is built up on the basis of actual questions asked by the women themselves. In that way the first and most important principle of teaching is observed; namely, interest.

I think it would be of interest to you to know the subject matter of the five lectures of the Philadelphia Marriage Council Course:

1. Relationships between single men and women (leading to marriage).
2. Anatomy and physiology.
3. Physiology of menstruation.
   Normal pregnancy.
4. A few abnormalities of pregnancy; the problems of venereal disease and abortion.
5. Physical relationships of marriage.
   Birth control, uses and abuses.
   Enduring love and marriage as a lasting institution.

In commenting upon this course of lectures, Dr. Mudd makes the following observation:

"The time interval between talks seemed to be valuable, not only because of the value of supplementary reading, but because time is a great safety valve when emotional processes are involved. The same results could hardly be obtained by having six talks in one week. . . . It should be noted that the reading of books about sex can be an upsetting and fearsome experience to an inadequately prepared or unusually anxious individual. The opportunity to talk over questions raised by reading is of paramount importance."

### Premarital Council in the Office

I have given at considerable length the point of view and the plan of teaching that experts like Dr. Mudd and Dr. Groves have evolved, to contrast it with the service that we doctors are expected to give to individual young women in the space usually of one office appointment shortly before marriage. It is little wonder that such service tends to be unsatisfactory to the patient and to the doctor. A recent case of my own may illustrate the point. I am sure that many of its aspects will sound all too familiar to those who practice gynecology and obstetrics.

The patient is the young daughter of rich parents, recently married to a young lawyer who is making a small income. She consulted a gynecologist for premarital and contraceptive advice. She is a hypersensitive, small woman, brought up by her mother to be afraid for her health. She apparently was told by my colleague to use a contraceptive jelly alone for birth control purposes. She promptly became pregnant. Because of an unreasoning fear of pregnancy based on her mother's over-solicitude, rather than upon any medical opinion as to her health, she made every effort by the use of castor oil, quinine and so forth to bring about a miscarriage. I first saw her when she was two and one-half months pregnant, at which time she was bleeding and having uterine cramps. With expectant treatment she survived this threat. During the fourth month, however, she started to flow again and finally, at five months, had spontaneous rupture of the membranes and eventually spontaneously expelled a dead fetus.

During the last two weeks of her pregnancy the parents had requested consultation repeatedly and demanded active interference in the pregnancy to protect their darling daughter. Fortunately, all consultants agreed that conservative and expectant treatment was the only proper course to follow. The first doctor was blamed most strongly for giving ineffective contraceptive advice. I was blamed for my conservative plan of treatment, both with the threatened miscarriage and with the later premature labor. The point that I am trying to make is, that the whole disastrous medical experience was the result primarily of the poor education and upbringing of the patient. The mother had conditioned her to the idea of poor health and a fear of pregnancy. I am sure that the patient was unable to coöperate sufficiently with the first gynecologist to get any real benefit from his single attempt to help her. With me, she was really an intelligent and coöperative patient, but lost all independence and self-control when her high-powered mother and father were at hand. I might also point out what a distorted point of view toward any subsequent pregnancy she must have! It will take much education, reassurance and weaning from her parents to protect her future childbearing.

Another case history of a patient seen just this week may offer some points of interest.

In contrast to the girl last described, this young woman was well adjusted to the whole world. She had been given a foam powder sponge method of contraceptive which she had found difficult and unpleasant to use. Two months after marriage, having gone a few days over her period, she consulted a young doctor as to whether or not she was pregnant. He told her that she probably was pregnant because of suggestive physical signs, and offered to do an Ascheim Zondek test. He also laid down an extraordinarily strict regime for her to follow throughout her pregnancy which greatly discouraged her. A few days later her period came. She consulted me as a gynecologist for reassurance about the condition of her pelvic organs. Having gotten this history from her, I naturally offered her contraceptive advice, and then learned that she had made an appointment with an excellent woman doctor in New York for that purpose for later the same afternoon! In other words, our patients do not know to which of us to turn for advice along these lines.

Another patient, forty-two years old, recently came to me planning to be married four days later. She had never read any books on marriage and had gained no accurate information from family or friends. She was a college graduate and remembered vaguely some fundamental courses on physiology. Examination disclosed a moderately tight hymen which admitted one finger with difficulty. She was advised to have a dilatation of the hymen under gas which she promptly accepted. She was advised not to use contraceptives because she and her husband-to-be wanted children. This girl is an example of an exception to the rule, for she was intelligent and coöperative enough to make a last-minute adjustment which will probably develop into a successful marriage relationship in spite of almost complete lack of specific education along these lines.

**Considering the case histories just described, and the general observations that preceded them, do you not agree with me that we must plan to take much more time with our premarital examinations than has been the cus-**

tom? I think we must tell our colleagues and educate our friends and patients to the idea that these girls should come to us, not one or two weeks before marriage, but any time after puberty, and certainly early in an engagement. This would enable the patients to do collateral reading and allow the doctor time to gain their confidence, give them reassurance, and meet any physical problems that may exist. Experience seems to show that it is desirable for the same doctor to see both the girl and her fiancé. These consultations are time-consuming and cannot easily be fitted into the busy office hour. As a matter of fact, most of these girls would much prefer to see the doctor at some time when the office was not full of other women, some of whom might know them. From this standpoint, an hour outside of regular office hours would be desirable. Incidentally, one would hope that we might teach our patients that such unusual, time consuming and all-important services might be properly compensated. Many American parents will gladly pay thousands of dollars for an elaborate wedding when they will balk at the cost of medical service which may easily make all the difference in their daughter's happiness and adjustment to marriage for the rest of her life.

### Prevention of Dyspareunia

While of course there are many aspects of the premarital examination that might be gone into, I am going to limit myself to the discussion of the prevention of dyspareunia and to the provision of contraceptive advice.

It has been my experience that the psyche of the patient is more likely to determine the occurrence of dyspareunia than is her anatomy. Those women are of course excepted who have a very small or tight hymen. The selfish, spoiled girl, the hyperæsthetic, will have vaginisms and severe dyspareunia sometimes, even if the tissues are soft and open. Other girls who have been accustomed to taking the world in their stride with a smile, may have a relatively small hymen which perhaps may admit only one finger with some difficulty; these girls may, if time permits, be dilated slowly in several office visits, or may be taught to dilate themselves; or, if time does not permit and they so choose, go into marriage with a small hymenal orifice, knowing that they will have at first moderate pain which they will quickly forget. To these girls no psychic injury will be done. In my experience, it is best to advise dilatation of the hymen under gas whenever the hymen is tight, if there is no time for the slower methods, but if these girls do not wish this and go into marriage knowing what to expect, there will be no harm done.

To go back to the spoiled and pain dreading girl: if the hymen is small and rigid, a partial crescentic, posterior excision and dilatation under anesthesia should be done. But no assurance should be given the parents that such a patient may not have dyspareunia anyway. The problem then becomes a psychological and educational one rather than a medical one.

In any case of continuing dyspareunia, it is well to remember the numerous points on the psychic side as enumerated by Groves:

1. Disgust with sex
2. Fear of pregnancy
3. Dislike of contraceptives
4. Instinctive tendency in some women to inhibit the expression and appearance of passion.
5. Feeling of guilt because of some past experience, either real or imaginary, having to do with sex relationships
6. Conscious homosexual tendencies
7. Realization that the motive for marriage was dishonest; that is not for love but for money, social position, et cetera
8. Instinctive hostility on the part of some women to the idea of masculine dominance

While on the subject of dyspareunia I should like to give you an observation which may be of some interest. It was my opportunity for several years after being resident at the Sloane Hospital for Women to perform the autopsies on the newborn under the direction of Prof. William C. Johnson. I noted at that time that I never examined a female baby that did not have an open hymen. I have still never seen a newborn baby with any of the many types of partially imperforate hymen found among adult women. The other day one of my patients brought me her three-year-old daughter who had sat down on some sharp object and caused a superficial laceration of the perineum. On examination of the introitus I found the posterior half of the hymen agglutinated in the mid line, leaving only a very small opening above. I was able very gently with a probe to divide the agglutination

and restore the normal open hymen. It seems to me probable that all the different types of imperforate hymen are acquired during infancy and childhood. It is of some interest that this little girl did not mind the examination in the slightest. Perhaps if our pediatric colleagues would subject all little girls to routine gentle examinations, when they become adults they would not be so terrified of vaginal examinations, and also they would not have constricted hymenal openings.

### Contraceptive Advice

Groves has said, "Most men and women, when they marry, have the will to succeed." So also, I think it is the experience of all of us in our premarital services to find that our patients, practically without exception, want to have children. But they don't want them at once. They usually say that they want them in either one or two years. Now it seems to me it is perfectly right for them to wish to plan that first pregnancy. I try to persuade them, however, not to fix on any arbitrary time of waiting, but to know that in general the sooner they have their first child, provided both parents are reasonably secure in health and means, the better off they will be. Someone has said that there is no convenient time for death, taxes and childbirth! They must be told that even though both husband and wife seem to their doctors to be entirely normal, that pregnancy does not always occur quickly and easily. These young patients must be taught that neither they nor their doctors are wise enough to give them perfect and happy marriage on demand, universally effective and agreeable contraceptive measures, and a baby on any day of the month that they may choose. Too many of them think that this is so!

It seems unnecessary and undesirable to go into detail about contraceptive techniques. A small percentage of girls, in my experience, can be comfortably fitted with a diaphragm before marriage. Others, if they wish maximum protection, are urged to have the husband use a condom and contraceptive paste. If they are willing to accept a moderate risk of pregnancy, they are advised to use a contraceptive paste alone or a suppository alone. With whatever method, it is important to impress on these patients that they must return for a follow-up examination and advice, at which time changes in technique are advocated if desirable. Otherwise, mistakes are sure to occur, the patient is disappointed and dissatisfied, and the doctor is criticized and loses a patient.

### Summary

In summarizing this paper, I hope that I have suggested to you the importance of supplying the education which our young people have demanded, and so much need, on the subjects of sex and marriage. If our schools and colleges fulfill their function in this respect, the technical services of doctors will become enormously more effective. For the present, doctors themselves should, I think, take more time with their patients in order to give them the reassurance and treatment that they need. Patients should come early rather than late for their premarital examinations, as the most effective service often extends over a period of several weeks. Contraceptive advice is given, but planned parenthood is urged as soon as seems possible to husband and wife. Finally, in closing, may we doctors hope that through our efforts and those of our many collaborators in other fields of society, the words of the old fairy tale may be more true in the future than they have been in the past—"And so they were married and lived happily ever after."

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### TRAUMATIC SHOCK

*(Continued from Page 881)*

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# Medicine Marches Forward

THE Proceedings of the MSMS House of Delegates appear in detail in this issue of THE JOURNAL. To epitomize the forward thinking of the 111 Delegates is to outline a few of the many activities of the MSMS House of Delegates at the 1941 session:

1. Modernizing the MSMS Constitution and By-Laws
2. Recommending the rehabilitation of rejected selectees
3. Renewing the MSMS Charter for another thirty-year period of activity
4. Creating a Section on General Practice
5. Adopting the reports of the twenty-three MSMS committees
6. Electing progressive practitioners of medicine (men in daily practice) to the various MSMS offices
7. Registering a vote of confidence in Michigan Medical Service.

Michigan Medical Service, the voluntary group medical care plan sponsored by the Michigan State Medical Society, was the subject of a number of resolutions and much discussion. The matter of studying the possibility of a limited liability certificate was referred to the membership of Michigan Medical Service for consideration. Such studies are being made, with a view to distributing medical service to the people of Michigan on a basis mutually satisfactory to them and to the medical profession.

Henry R Carstens

President, Michigan State Medical Society

President's

Page

# EDITORIAL

## IN THESE HANDS

■ At the meeting of the House of Delegates in September Howard H. Cummings of Ann Arbor was elected President-elect. For a number of years he has served the Michigan State Medical Society on various committees and on The Council. Last year he was Vice Chairman of The Council. His keen, calm judgment and delightful personality combined with a deep and earnest interest in the welfare of his colleagues marks him for his outstanding caliber for the chief executive office of the Michigan State Medical Society. He has been associated with Dr. J. D. Bruce in the direction of postgraduate medical education in Michigan and the success of this program has been in no little measure due to his intelligent administration and his well-deserved popularity.

A. S. Brunk was reëlected Chairman of The Council that his unusual executive ability and his sound views on the practice of medicine might continue to serve the profession.

Vernor Moore of Grand Rapids was retained as Councilor of the Fifth District representing Barry, Ionia-Montcalm, Kent and Ottawa Counties. He was also reëlected Chairman of the Finance Committee of The Council demonstrating the confidence of The Council in his continuing activity as the "watch-dog of the treasury."

Wilfrid Haughey of Battle Creek was again chosen Chairman of the Publications Committee following a year in which much of the activity and progress of the state society and the Michigan Medical Service have been due to his direction and assistance.

E. F. Sladek of Traverse City was continued as Chairman of the Committee on County Societies. His coördination of the activities of the various component units of the state medical society has continued to strengthen the Michigan State Medical Society.

Otto O. Beck from the Fifteenth District was elected to succeed Dr. Cummings as Vice Chairman of The Council. His judgment and keen interest in medical progress rounds out an Executive Committee of unusual strength and significant qualities of leadership.

C. E. Umphrey of Detroit was reëlected Councilor of the First District of Detroit. He had been appointed last year to fill the vacancy which occurred when Henry R. Carstens became President-elect. Dr. Umphrey has continued to sustain his previous reputation as a stalwart defender of organized medicine which began in his Wayne County Medical Society activities.

R. J. Hubbell of Kalamazoo was elected Councilor of the Fourth District. He had been appointed in November, 1939, to fill the unexpired term of F. T. Andrews. His capable administration has won the support of delegates of his district and the respect of the other Councilors.

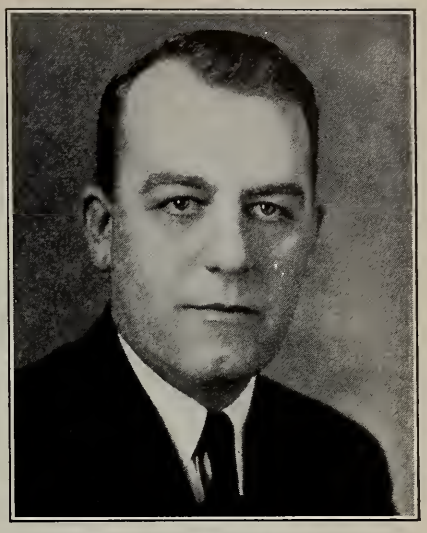
R. S. Morrish was reëlected Councilor of the Sixth District. He had been appointed Councilor of the Sixth District on January 15, 1940, to fill the unexpired term of I. W. Greene, who had resigned. His able service on The Council has been recognized in this short time.

Lester J. Johnson of Ann Arbor was chosen for the office of Councilor from the Fourteenth District vacated by the resignation of Howard H. Cummings. Dr. Johnson received his B.S. from the University of Michigan in 1923 and his M.D. in 1925. He has been very active in the Washtenaw County Medical Society, having been Chairman of the Public Relations Committee and Delegate from 1938 to 1941. Last year he served as a member of the Public Relations Committee of the state society. His progressive views and enthusiastic desire for advancement of medical organization are well known. All the delegates believe that he will well serve the profession of the state in this new office.

P. L. Ledwidge, of Detroit, was elected Speaker of the House of Delegates succeeding Dr. O. D. Stryker, of Fremont. Doctor Ledwidge graduated from Wayne University College of Medicine in 1920 and after an internship at Harper Hospital and a residency in Medicine at Children's Hospital and Harper Hospital he became associated with the late Dr. E. W. Haass in the private practice of internal medicine until 1925, since which time he has been alone in private practice. He is a Fellow of the American College of Physicians and Diplomate of the

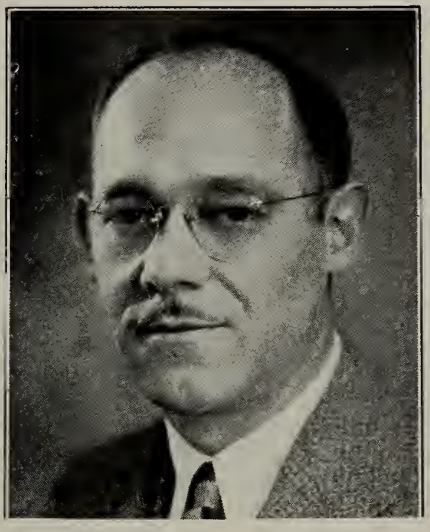
Howard H. Cummings, M.D.,
Ann Arbor, President-Elect

A. S. Brunk, M.D., Detroit,
Chairman of The Council



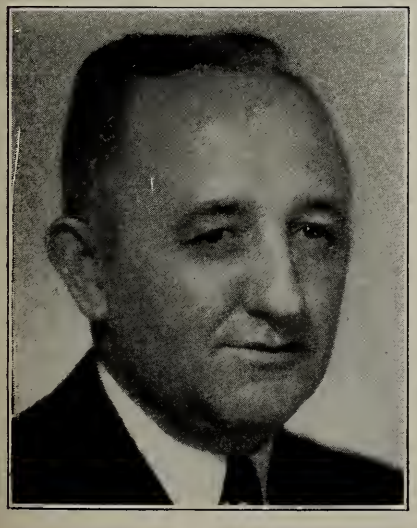
Otto O. Beck, M.D., Birmingham,
Vice Chairman of The Council

Wilfrid Haughey, M.D., Battle Creek,
Chairman of the Publication
Committee



E. F. Sladek, M.D., Traverse City,
Chairman of the County Societies
Committee

Vernor Moore, M.D., Grand Rapids,
Chairman of the Finance Committee



C. E. Umphrey, M.D., Detroit,
Councilor, First District

R. J. Hubbell, M.D., Kalamazoo,
Councilor, Fourth District

R. S. Morrish, M.D., Flint,
Councilor, Sixth District

American Board of Registration in Internal Medicine. At present he is Associate Physician Inside Staff of Harper Hospital and Assistant Professor in Clinical Medicine at Wayne University College of Medicine. He is a member of the

L. J. Johnson, M.D.,
Ann Arbor, Councilor,
Fourteenth District

P. L. Ledwidge, M.D.
Detroit, Speaker
House of Delegates

Detroit Medical Club and the Detroit Academy of Medicine. He has been a delegate to the Michigan State Medical Society for a number of years and has taken a very active interest, having served as member and chairman of several important committees. His activity in organized medicine in Wayne County is well known and his keen interest and analytic ability will be invaluable on the Executive Committee of The Council of which he becomes a member.

The members surely will realize the safety of their future in such efficient and trustworthy hands. With active coöperation by the membership the state society may well continue its aggressive program.

## MSMS

## THE DOCTOR COMES SECOND

■ "Hospitals are provided for the sick and their doctors, not the sick and the doctors for the hospital." With these words Miles Atkinson, in the *Atlantic Monthly,* summarizes the oft forgotten fundamental reason for the maintenance of a hospital. In this piercing expose of professional relationship the major contention presented is the relationship of the patient to the hospital, which justly is the primary consideration.

Mr. Atkinson criticizes the inefficiencies of the hospital, particularly in a financial manner, and then condemns the hospitals' habit of charging for the physicians' service which is given free. Generally the larger the city and the larger the hospital the more abuse to the physician exists.

### Your Birthright for a Mess of Pottage

**It is of interest to the profession to determine what steps the physician may take to free himself from the bondage of certain hospital administrators. A part of the "mess of pottage" is the closed staff. Unquestionably the doctor frequently has sold his "birthright" of independence in the establishment of the closed staff for he has made his position on the staff more important (in his own eyes, at least) than his inter-professional coöperation, which should have been guaranteed by virtue of his medical training.**

All have seen the beginning and the end of the enmeshing of the doctors into the web of hospital domination. The young man enters the staff in order that he may have the association with medical leaders of his community and, in the larger centers, the postgraduate experience in the free and part pay clinics. He sees some of his elders and teachers who may wield more or less dictatorial powers in hospital relationships, oftimes to the absurdity of having included upon every scientific paper produced in that particular hospital or clinic the name of this "Little Caesar." What a cheap way to achieve professional recognition!

The sacrificing doctor after a year or more becomes promoted with a high-sounding title and the privilege of doing more free work and contributing more time. And as he gives more time and becomes more involved in this web he realizes that he has sacrificed his independence; he is now definitely associated in his colleagues' and patients' minds as an "X" hospital man and he fears the consequence should he rebel against a superintendent's vagary since the staff man well knows there are many others who are just waiting to step into his position of honor and travail, willing to go sled length to attain this position. The story is an old one.

The trustees of Hospital A are told that the staff men of their hospital are serving five thousand patients a year in their clinics while Hospital B is serving only three thousand. Tycoon A, who is Chairman of the Board of Hospital A, twits his business competitor B, Chairman of the Board of Hospital B, who comes raving and

ranting into the next board meeting demanding that Hospital B must next year have seven thousand in its clinics. The word goes to the superintendent and then to the Chief of Staff and then down. Occasionally even paid advertising is used to fill up vacant clinics.

The medical director of one prominent part pay clinic maintains a standard fee of twenty-five dollars for consultation in his private practice. On his staff are some hundred capable specialists whose established fees are from five to twenty dollars but when a patient of the director cannot afford to pay the twenty-five dollar fee which is exacted by him he refers the patient directly to his clinic in which his colleagues donate their services and the patient is charged fifty cents or one dollar.

**Abuses like this could be cited ad infinitum but what is the solution? There is only one solution, and that is organized medicine. This organization must be strongest in its smallest unit—the county medical society. If the county medical society is the basic power of the profession in the district and if one's main medical attachments are founded on that society, the physician will not be exploited either by the hospital or by any other development. It is almost axiomatic that the stronger the local medical organization the more satisfactory the standards and the conditions of practice in that county and this is true in the largest and the smallest societies.**

The term "member of the county medical society" should mean more than membership on the staff of any hospital and when it does the private practice of medicine will be assured for all.

### Reference

Atkinson, Miles: The Patient Comes First. Atlantic Monthly, August, 1941.

MSMS

## READERS' SERVICE

■ Beginning with this issue, The Journal is inaugurating a new service. It has been the practice to send abstracts of the articles published in this journal to the editors of the other state journals in order that they may use them when and where desired to keep their readers informed as to scientific articles published in Michigan.

Now these digests will be published in The Journal of the Michigan State Medical Society.

The general grade of the scientific articles received and printed has been universally high and complete reading of each essay is strongly recommended to the progressive practitioner. But the usual drains on the practicing physician's time and the immense amount of literature (the reading of which seems to be almost demanded of the progressive physician) indicate the necessity of short cuts in medical literature.

**A résumé of each scientific article printed in this issue will be found under a department entitled "Readers' Service." Here you can quickly review (average reading time five or six minutes) the essential parts of each article, as abstracted by its author, and then you may determine which papers are of primary importance for your reading.**

It is hoped that your interest will be aroused by the abstracts sufficiently so that you will read all of them, that at least you will have some knowledge of the material presented in the body of the essay.

Hence we suggest that unless you intend to read The Journal from cover to cover you turn first to this department and sample the scientific cuisine herein presented (See page 856).

MSMS

## POSTGRADUATE COURSES FOR THE UPPER PENINSULA

■ At the September meeting in Grand Rapids, The Council voted to underwrite the establishment of five Postgraduate Medical Conferences in the Upper Peninsula similar to those now existent in the Lower Peninsula. This extension of service to the Upper Peninsula necessarily entails the expenditure of considerable funds but it has been felt that these courses should be presented in some of the smaller population centers. They probably will not be started until next spring but it is hoped that the coöperation and attendance will be sufficient to warrant the continuance of this expenditure. Special efforts will be made by the Postgraduate Medical Education Committee to furnish the best teachers available on the most practical subjects.

# PROCEEDINGS OF THE HOUSE OF DELEGATES—1941

## TABLE OF CONTENTS


| | | Introduction of Business | Reference Committee Reports |
|---|---|---|---|
| | Record of Attendance | 896 | |
| | Miscellaneous Addresses: | | |
| | 1. H. Allen Moyer, M.D. | 897 | |
| | 2. John M. Pratt | 897 | |
| | 3. Lt. Col. H. A. Furlong, M.D. | 899 | |
| I. | President's Address | 898 | 909 |
| II. | President-Elect's Address | 899 | 909 |
| III. | Annual Report of The Council | 900 | 909 |
| IV. | Report of Delegates to the A.M.A. | 901 | 909 |
| V. | Resolutions: | | |
| | 1. Re: Appreciation to Michigan Legislature and the Governor | 901 | 914 |
| | 2. Re: Special Memberships (Emeritus and Retired) | 901, 902, 905, 909 | 913 |
| | 3. Re: Michigan Medical Service: | | |
| | (a) Callery Resolution | 902 | 909 |
| | (b) Brasie Resolution No. 1 | 902 | 909 |
| | (c) Brasie Resolution No. 2 | 903 | 910 |
| | (d) Brasie Resolution No. 3 | 903 | 910 |
| | (e) Brasie Resolution No. 4 | 903 | 910 |
| | (f) Insley Resolution | 905 | 910 |
| | (g) Ekelund Resolution | 906 | 911 |
| | 4. Re: Election of Delegates to A.M.A. | 904 | 914 |
| | 5. Re: Professional Liaison Committee | 904 | 914 |
| | 6. Re: Section on General Practice | 905 | 914 |
| | 7. Re: National Physicians' Committee | 905 | 914 |
| | 8. Re: Premarital Instruction | 905 | 911 |
| | 9. Re: Training of Medical Technicians | 906 | 909 |
| VI. | Amendments to Constitution and By-Laws: | | |
| | 1. By-Laws, Chapter 1, new Section 7 re Transfer of Membership to Another State Society | 902 | 915 |
| | 2. *Constitution,* Article III, Section 4, re Honorary Members | 903 | To 1942 Session |
| | 3. *Constitution,* Article IV, Section 3, re Officers and House of Delegates | 903 | To 1942 Session |
| | 4. *Constitution,* Article IV, Section 5, re Election by House of Delegates | 903 | To 1942 Session |
| | 5. *Constitution,* Article X, Section 1, re clarification of "session" and "meeting" | 903 | To 1942 Session |
| | 6. By-Laws, Chapter 3, Section 1, re clarification of "session" and "meeting" | 903 | 915 |
| | 7. By-Laws, Chapter 3, Section 7-L, changing word "session" to "meeting" | 903 | 915 |
| | 8. By-Laws, Chapter 3, Section 2, re qualifications of House of Delegates' members | 903 | 913 |
| | 9. *Constitution,* Article III, Sections 3 and 5, re Associate and Junior Memberships | 904 | To 1942 Session |
| | 10. By-Laws, Chapter 5, Section 1, re Annual Meeting of The Council | 904 | 913 |
| | 11. *Constitution,* Article V, Section 1, re Officers and The Council | 904 | To 1942 Session |
| | 12. By-Laws, Chapter 5, Section 1, re Executive Committee of The Council | 904 | 913 |
| | 13. By-Laws, Chapter 3, Section 7-d, re Election of Delegates and Alternate Delegates to A.M.A. | 904 | 913 |
| | 14. By-Laws, Chapter 4, Section 4, re duties of Secretary | 909 | 915 |
| | 15. By-Laws, Chapter 10, Section 1, re change word "session" to "meeting"; also "present" to "seated" | 909 | 915 |
| | 16. Unfinished Business from 1940 House of Delegates (Proposed Amendments to Constitution and By-Laws) See IX-6a | 909 | 912 |
| | 17. By-Laws, Chapter 7, Section 1, re special membership applications | 914 | 915 To 1942 Session |

VII. Reports of Standing Committees:

| | | |
|---|---|---|
| 1. Legislative Committee | 906 | 911 |
| 2. Distribution of Medical Care Committee | 906 | 911 |
| 3. Medical-Legal Committee | 906 | 911 |
| 4. Representatives to Joint Committee on Health Education | 906 | 911 |
| 5. Preventive Medicine Committee | 906 | 911 |
| 6. Cancer Committee | 907 | 911 |
| 7. Maternal Health Committee | 907 | 911 |
| 8. Syphilis Control Committee | 907 | 911 |
| 9. Tuberculosis Control Committee | 907 | 911 |
| 10. Industrial Health Committee | 907 | 911 |
| 11. Mental Hygiene Committee | 907 | 911 |
| 12. Child Welfare Committee | 907 | 911 |
| 13. Iodized Salt Committee | 907 | 911 |
| 14. Heart and Degenerative Diseases Committee | 908 | 911 |
| 15. Postgraduate Medical Education Committee | 908 | 911 |
| 16. Ethics Committee | 908 | 911 |
| 17. Public Relations Committee | 908 | 911 |

VIII. Reports of Special Committees:

| | | |
|---|---|---|
| 1. Committee on Nurses Training Schools | 908 | 911 |
| 2. Medical Preparedness Committee | 908 | 912 |
| 3. Prelicensure Medical Education Committee | 908 | 911 |
| 4. Radio Committee | 908 | 912 |
| 5. Advisory Committee to Woman's Auxiliary | 908 | 912 |
| 6. Committee on Scientific Work | 909 | 912 |

IX. Reports of Reference Committees:

| | |
|---|---|
| 1. On Officers Reports | 909 |
| 2. On Council Reports | 909 |
| 3. On Reports of Standing Committees | 911 |
| 4. On Resolutions | 913, 914 |
| 5. On Reports of Special Committees | 911, 912 |
| 6. On Amendments to Constitution and By-Laws: | |
| (a) Unfinished Business from 1940 House of Delegates | 912 |
| Constitution, Article IV, Section 3 (Rejected) | 912 |
| Constitution, Article IX, Section 4 (Rejected) | 912 |
| Constitution, Article XII, Section 1 (Adopted) | 912 |
| Constitution, New Article XII; Renumbering Old Article XII to Article XIII (Adopted) | 913 |
| By-Laws, Chapter 10, Section 1 (Adopted) | 913 |
| (b) Re By-Laws changes proposed by 1941 House of Delegates (Adopted) | 913 |
| By-Laws, Chapter 1, New Section 7 (Adopted) | 915 |
| By-Laws, Chapter 3, Section 1 (Adopted) | 915 |
| By-Laws, Chapter 3, Section 7-d (Adopted) | 913 |
| By-Laws, Chapter 3, Section 7-L (Adopted) | 915 |
| By-Laws, Chapter 3, Section 2 (Adopted) | 913 |
| By-Laws, Chapter 5, Section 1 (Adopted) | 913 |
| By-Laws, Chapter 5, Section 1 (Adopted) | 913 |
| By-Laws, Chapter 4, Section 4 (Adopted) | 915 |
| By-Laws, Chapter 10, Section 1 (Adopted) | 915 |
| By-Laws, Chapter 7, Section 1 | 915 |
| | To 1942 Session |

X. Elections:

| | |
|---|---|
| 1. Councilor of First District | 915 |
| 2. Councilor of Fourth District | 915 |
| 3. Councilor of Fifth District | 916 |
| 4. Councilor of Sixth District | 916 |
| 5. Delegates to A.M.A. | 916 |
| 6. Alternate Delegates to A.M.A. | 916 |
| 7. President-Elect | 917 |
| 8. Councilor of Fourteenth District | 917 |
| 9. Speaker of House of Delegates | 917 |
| 10. Vice Speaker of House of Delegates | 918 |

XI. New Business:

| | |
|---|---|
| 1. Honorarium to Retiring Speaker | 918 |
| 2. Place and Date of 1942 Annual Meeting | 918 |

XII. Adjournment ..... 918

# MICHIGAN STATE MEDICAL SOCIETY

## *Seventy-sixth Annual Session*

### Proceedings of House of Delegates

**Pantlind Hotel, Grand Rapids, Michigan**

**September 16, 1941**

## Tuesday Morning Meeting

### September 16, 1941

The first meeting of the House of Delegates, held in connection with the Seventy-sixth Annual Convention of the Michigan State Medical Society, at the Pantlind Hotel, Grand Rapids, Michigan, September 16, 1941, convened at nine-fifty o'clock, O. D. Stryker, M.D., Fremont, Speaker, presiding.

THE SPEAKER: The meeting will please come to order.

Dr. Day, are you ready to report for the Credentials Committee?

LUTHER W. DAY, M.D.: Mr. Speaker, total number of ninety-nine delegates registered and seated in the House. That constitutes a quorum of the House of Delegates. Of this total, there is not a majority from any one county. Consequently, the House of Delegates is legally constituted.

#### RECORD OF ATTENDANCE

| | COUNTY | DELEGATE | Session 1st | 2nd | 3rd |
|---|---|---|---|---|---|
| 1. | Allegan | C. A. Dickinson | x | x | — |
| 2. | Alpena-Alcona-Presque Isle | W. E. Nesbitt | x | x | x |
| 3. | Barry | Gordon F. Fisher | x | x | — |
| 4. | Bay-Arenac-Iosco | C. L. Hess | x | x | x |
| | | Fred Drummond | x | x | x |
| 5. | Berrien | Don W. Thorup | x | x | x |
| 6. | Branch | R. L. Wade | x | x | x |
| 7. | Calhoun | A. T. Hafford | x | x | x |
| | | George W. Slagle | x | x | x |
| 8. | Cass | S. L. Loupee | x | x | x |
| 9. | Chippewa-Mackinac | L. M. McBryde | x | x | x |
| 10. | Clinton | G. H. Frace | x | x | x |
| 11. | Delta-Schoolcraft | J. J. Walch | x | x | x |
| 12. | Dickinson-Iron | W. H. Alexander | x | x | x |
| 13. | Eaton | Don V. Hargrave | x | x | x |
| 14. | Genesee | George J. Curry | x | — | x |
| | | Donald R. Brasie | x | x | x |
| | | Frank E. Reeder | x | x | x |
| | | Henry Cook | x | — | — |
| 15. | Gogebic | Not represented | | | |
| 16. | Grand Traverse-Leelanau-Benzie | Robert T. Lossman | x | x | x |
| 17. | Gratiot-Isabella-Clare | M. G. Becker | x | x | x |
| 18. | Hillsdale | Luther W. Day | x | x | x |
| 19. | Houghton-Baraga-Keweenaw | C. A. Cooper | x | x | x |
| 20. | Huron | C. W. Oakes | x | x | x |
| 21. | Ingham | C. F. DeVries | x | x | x |
| | | T. I. Bauer | x | x | x |
| | | L. G. Christian | x | x | x |
| 22. | Ionia-Montcalm | W. L. Bird | x | x | x |
| 23. | Jackson | J. J. O'Meara | x | x | x |
| | | H. A. Brown | x | x | — |
| 24. | Kalamazoo | I. W. Brown | x | x | x |
| | | Louis W. Gerstner | x | x | x |
| 25. | Kent | A. V. Wenger | x | x | x |
| | | Carl F. Snapp | x | x | x |
| | | George H. Southwick | x | x | x |
| | | A. B. Smith | — | x | x |
| | | W. C. Beets | x | — | — |
| | | P. W. Kniskern | x | x | x |
| 26. | Lapeer | D. J. O'Brien | x | — | x |
| 27. | Lenawee | M. R. McGarvey | x | x | x |
| 28. | Livingston | D. C. Stephens | x | x | — |
| 29. | Luce | Henry E. Perry | x | x | x |
| 30. | Macomb | D. Bruce Wiley | x | x | x |
| 31. | Manistee | E. A. Oakes | x | x | x |
| 32. | Marquette-Alger | V. Vandeventer | x | x | x |
| 33. | Mason | W. S. Martin | — | — | x |
| 34. | Mecosta-Osceola-Lake | Gordon Yeo | x | x | x |
| 35. | Medical Society of North Central Counties | C. R. Keyport | x | x | x |
| 36. | Menominee | H. T. Sethney | x | x | x |
| 37. | Midland | H. H. Gay | x | x | x |
| 38. | Monroe | D. C. Denman | x | x | x |
| 39. | Muskegon | E. O. Foss | x | x | x |
| | | E. N. D'Alcorn | x | x | x |
| 40. | Newaygo | O. D. Stryker | x | x | x |
| 41. | Northern Michigan | Fred C. Mayne | x | x | x |
| 42. | Oakland | C. T. Ekelund | x | x | x |
| | | Z. R. AschenBrenner | x | x | x |
| | | B. T. Larson | x | — | — |
| 43. | Oceana | Merle G. Wood | x | — | — |
| 44. | Ontonagon | W. F. Strong | x | x | x |
| 45. | Ottawa | A. E. Stickley | x | x | x |
| 46. | St. Clair | A. L. Callery | x | x | x |
| 47. | St. Joseph | R. A. Springer | x | x | x |
| 48. | Saginaw | C. E. Toshach | x | x | x |
| | | F. O. Novy | x | x | — |
| 49. | Sanilac | R. K. Hart | x | x | x |
| 50. | Shiawasse | I. W. Greene | x | x | x |
| 51. | Tuscola | T. E. Hoffman | x | x | x |
| 52. | Van Buren | W. R. Young | x | x | x |
| 53. | Washtenaw | John A. Wessinger | x | x | x |
| | | Dean W. Myers | x | x | x |
| | | L. J. Johnson | x | x | x |
| | | L. E. Knoll | x | x | x |
| 54. | Wayne | R. H. Pino | x | x | x |
| | | Gaylord S. Bates | x | x | x |
| | | Henry A. Luce | x | | |
| | | R. L. Novy | x | x | x |
| | | Douglas Donald | x | x | x |
| | | A. E. Catherwood | x | x | x |
| | | T. K. Gruber | x | x | x |
| | | W. D. Barrett | x | x | x |
| | | R. M. McKean | x | x | x |
| | | Allan McDonald | x | x | x |
| | | H. J. Kullman | x | x | — |
| | | L. J. Hirschman | x | x | x |
| | | E. D. Spalding | x | x | x |
| | | G. C. Penberthy | x | x | x |
| | | W. B. Cooksey | x | x | x |
| | | C. E. Dutchess | x | x | x |
| | | E. A. Osius | x | x | x |
| | | J. H. Andries | x | x | — |
| | | R. C. Jamieson | x | x | x |
| | | H. F. Dibble | x | x | x |
| | | S. W. Insley | x | x | x |
| | | P. L. Ledwidge | x | x | x |
| | | C. F. Brunk | x | x | x |
| | | Wm. S. Reveno | x | x | x |
| | | C. F. Vale | x | x | x |
| | | F. W. Hartman | x | x | x |
| | | R. V. Walker | x | x | x |
| | | C. E. Simpson | x | x | x |
| | | J. A. Kasper | x | x | x |
| | | L. J. Morand | x | x | — |
| | | C. K. Hasley | x | x | x |
| | | B. L. Connelly | x | x | x |
| | | C. E. Lemmon | x | x | x |
| | | E. R. Witwer | x | x | x |
| | | L. O. Geib | x | x | x |
| | | M. H. Hoffmann | x | x | — |
| | | Arch Walls | x | x | x |
| | | C. S. Ratigan | x | x | x |
| 55. | Wexford | W. Joe Smith | x | x | — |

THE SPEAKER: According to the report of the Credentials Committee, the House of Delegates is now legally constituted. The report of the Credentials Com-

mittee will be taken as the roll call, if there is no objection from the House.

You will find in the Handbook the appointment of the various reference committees.

The Speaker will dispense with the Speaker's address due to the amount of work which we have before us.

For many of you, this is your first meeting. Many of the men who were with us in former years are now in army service. For you who are new, and for all of you, remember that you constitute the legislative group of this Society. Upon what you think, upon what you say and what you do here will depend the future of the Michigan State Medical Society.

At this time the State Health Commissioner has a few words he wishes to say.

H. Allen Moyer, M.D.: Mr. Chairman and Delegates: I bring greetings from the Health Department to the Michigan State Medical Society.

There is one subject that I wish to bring before you today on which you may take action some time in the future. As you all realize, today in the State of Michigan cancer is the second greatest cause of death, and we have no way of knowing the number of deaths except through the death notices that are presented to be recorded.

I would like to have this body take into consideration the subject whether cancer should be registered as a contagious disease. It is not a contagious disease but it should be recorded, that we may know the number of cases and follow through to find out how many cures are being effected in the State of Michigan. If cancer is recorded, the same as a contagious disease, there would be the understanding that the doctor in attendance on these cases would be contacted at least once or twice a year, to follow through and to find out how long these patients are living after being treated. We could reduce the number of deaths, and know the number of cures being accomplished. It would be of great benefit, and it would be a record which would be very beneficial to the State of Michigan.

New York State and Massachusetts have adopted this form. I wish the delegates would consider this and that some action be taken in the future that would justify the Department of Public Health in reporting cancer. I hope you take this question under consideration because I feel it is vital to the records in the State of Michigan.

The Speaker: I wish to make one change which has just been invited to my attention, in the membership of the Reference Committee on Reports of Standing Committees. Dr. G. W. Slagle will replace Dr. Harvey Hansen, Calhoun County.

At this time we will hear from John M. Pratt of the National Physicians Committee. Dr. Luce!

Henry A. Luce, M.D. (Wayne): Gentlemen, not sailing under false colors, for once in my life, I am being honored this morning by being asked by Dr. J. Milton Robb to take his place.

At this time, Mr. Chairman, I wish, if it would be in order, that this House of Delegates instruct our Secretary to send to Dr. Robb a telegram of regrets that he is sick and unable to attend.

The Speaker: That is in order and will be done.

Henry A. Luce, M.D.: Several years ago, a group of physicians, representative doctors, doctors standing high in their profession, doctors whose integrity was unquestioned, organized the National Physicians Committee for the Extension of Medical Service and secured the services of John M. Pratt as Executive Administrator.

On behalf of Dr. Robb, on behalf of those who believe in individualism in this country, it is a pleasure to introduce to you John M. Pratt.

John M. Pratt: Dr. Stryker, Dr. Luce and members of the House of Delegates of the Michigan State Medical Society: Personally, I always feel very much at home with the doctors of the State of Michigan.

I am much pleased that it falls to my lot to be with you here today, and I am to have the privilege of talking at the County Secretaries Conference tomorrow. In this case we are reversing the process. In nearly all instances I have been able generally to outline the why, the wherefore, the method, and the progress at a general meeting, before talking to a House of Delegates. The members of the board of the National Physicians Committee are hoping that before your House of Delegates adjourns you will have sufficient insight, sufficient knowledge and sufficient interest in this vital aspect of medicine to take some formal action.

On a question as vital and as important as this one, it is a very simple think to take an hour, or more, in discussing the details of the problem. I shall attempt only to place before you what we conceive to be the basic issues involved, that were responsible for bringing into being the National Physicians Committee.

In 1933 there were brought into the picture in this country two wholly new factors or concepts: first, making a business out of politics.

Second, the establishment of controls through the agency of propaganda. That was new to us. I only need to use medicine to illustrate what it meant. You men are all familiar with the fact that in July of 1938 the government called into being the National Health Conference. That was only one of many, but it established a kind of precedent, because that National Health Conference was never designed or intended to do anything about this health problem save to provide the sounding board and the base of propaganda that emanated from it.

In the following October the American Medical Association was hailed before the federal grand jury, and again we had the excuse or the base for a nation-wide effort to tell all of the people in this country that the physicians of the United States had not been doing their job in providing medical service.

In December of that year, Dr. Fishbein, Dr. West, Dr. Leland, two other men from Chicago, the American Medical Association, the Washington District Association, the Houston-Texas Association, and some fourteen other physicians were placed under criminal indictment.

That Health Conference, that grand jury action, the indictment of these medical men were important for one thing. They provided the base of a nation-wide publicity which was used for one purpose, and that purpose was to break down the confidence of the American people in our system of distributing medical service and, to an extent, discredit the practicing physician, to the end that we might bring into being in this country a revolutionary plan of providing medical service.

Those grand jury indictments in December of 1938 were followed in February by the introduction of the Wagner National Health Bill. This was to implement the idea behind all of these moves. This was new, not only new to medical men but new in all of the things undertaken in this nation.

As a consequence, after the indictment of these men before the federal grand jury, American medicine, organized for nearly one hundred years, performing the greatest service of any professional or trade group in this country, frankly did not know what to do.

Medicine was not geared up to meet that kind of attack; no group in this country was geared up to meet it. It is by accident that the whole of this effort

had its beginnings in this state at a meeting of your State Council in Detroit, November, 1938.

From that emanated the most intensive, the most effective, the most comprehensive counter-propaganda effort that had ever been made in the United States.

Most of you men probably do not realize all that has been done, but, following this meeting in Detroit, interested physicians went to Chicago, Minneapolis and St. Paul, out to San Francisco and back to Kansas City and St. Louis and Indianapolis.

In November, 1939, the National Physicians Committee for the Extension of Medical Service was organized. There were two essentials. First, to tell the people that all of the things they were being told about the inadequacy of medical service were only partially true, and that there were other truths of more importance to the public than the part truths they were being told.

Second, the necessity for organized medicine assuming the responsibility for providing, to the very ultimate, medical service for all the people.

There have been possibly as many as two hundred experimental efforts made to provide medical service. Again Michigan is at the forefront. In May of last year I had the privilege of thoroughly canvassing the medical situation in this state, with all of the detailed information in connection with its medical service. I have followed closely the development of your Michigan Medical Service.

Two states, Michigan and California, by making these experimental efforts, in many respects wholly successful, have done more than any other single development to insure a continuation of the medical profession continuing to provide medical care without political interference.

If you will keep in mind two new concepts on the American scene—government in business, controls by propaganda—you will understand that the National Physicians Committee for the Extension of Medical Service is the only agent of the medical profession to undertake the counter effort that is essential, to preserve the independence of medicine in the United States.

THE SPEAKER: Thank you, Mr. Pratt.

We will proceed to the next order of business, which will be the President's address, P. R. Urmston, M.D.

# I. President's Address

Mr. Speaker and Members of the House of Delegates and Officers:

After fifteen years as an officer of the Michigan State Medical Society, serving during these years as Chairman of The Council and Executive Committee and the last two years as an ex officio member, I should be able to write a volume in the interest of our organization.

I have watched the growth of the Michigan State Medical Society in the last few years from a moderately active organization to one capable of handling the interests of any large corporation. This change has been brought about since the centralization of our activities in our executive offices in Lansing and the cooperation of the Secretary and Executive Secretary. Much of the credit is due to our Executive Secretary, Mr. Burns.

### "Choose Your Councilor Wisely"

A councilor should be chosen by his district for his executive ability, stamina, endurance, longevity and his willingness to give us time from his practice to fulfill his obligations. Therefore, a councilor should be chosen wisely. The members of the Executive Committee of The Council are the Chairman, Vice Chairman and Chairman of the Finance, County Societies and Publication Committees. They are elected by The Council. The Speaker of the House is a member of the committee by authority of the House of Delegates, with the right to vote. Most of the administrative activity of the Society is done by the Executive Committee. This has been one of our most active years and I wish to praise The Council and its Executive Committee for their good judgment and hard work.

### Proposed Amendments to Constitution

The value of the experience of our Past President to the House of Delegates has been a matter of discussion for several years. An amendment to the Constitution was presented to the 1940 House of Delegates proposing that officers, past presidents and councilors be made ex officio members of the House of Delegates. The officers and councilors should accept this recognition as their presence is valuable. This all leads up to the essential point, the status of the active President, President-Elect and the Secretary as members of the Council and Executive Committee. Why not give more voice and power to these officers during their incumbency? Responsibility is theirs now, without the right to vote.

### Medical Preparedness

"One examination for selectees" was the subject of an article on the President's Page in the April M.S.M.S. JOURNAL. The principle set forth in this article is about to be put in effect in the Upper Peninsula, that is, a traveling army induction unit. We hope this will soon be universal. The army rejections will then be higher by the economic loss and disappointments of the selectee will be lower.

The rules and regulations for physical requirements for 1-A and 1-B selectees have changed so fast that it seems unwise to quote them at this time. Under new regulations many remedial cases will then be cared for by the army.

Rehabilitation of the rejected draftees has been studied by your president and I refer you to the President's Page of the February M.S.M.S. JOURNAL. At the present time no plan for the rehabilitation of rejected draftees is feasible but when it does become so, either by the Federal government, state or local agencies, we will always insist (here I refer you to the second recommendation of The Council, on page 39 of your Handbook) that the physician-patient relationship and free choice of Doctor of Medicine shall be maintained. At the present time the public is not demanding any such action as shortages in essential comforts have diverted their attention.

### Thanks to Committees

All committees appointed by your president have fulfilled my expectations and I wish to commend their work. Read their reports in the Handbook and JOURNAL.

The death of Dr. C. K. Valade, chairman of the Syphilis Control Committee, was a shock and a loss to the Michigan State Medical Society. No resignations or changes in The Council or any Committees this year speaks well for the future welfare of our organization.

### Important Role of the General Practitioner in Medicine

A newspaper article under the heading "Army Specialists vs. the General Practitioner" would lead the public to believe that the M.D.s doing general practice are not keeping up to date due to lack of postgraduate educational facilities. Our extramural postgraduate meetings, the universities' postgraduate courses, and this week's M.S.M.S. convention (with thirty out-of-state guest essayists whose presentations are especially written for the general practitioner) should put him on a basis in the important field of general practice comparable to the standing of a specialist in his field.

Without the general practitioner Medicine, as practiced today, could not exist. The A.M.A. is recognizing him in a separate section in medicine. May the time never come when we all become narrow-minded by a restricted specialty viewpoint.

### MSMS Endowment for Postgraduate Medicine

With increasing taxes, inheritance taxes on estates and many others we must look to the future in financing our postgraduate courses. At the present time only a small part of the cost is carried by the MSMS. Several years ago The Council proposed that a fund be created for this purpose so that the MSMS could finance all extramural postgraduate courses and other postgraduate activities except those provided exclusively by the two universities. I recommend that the House of Delegates and The Council propose changes in our Constitution and By-Laws for the creation and custody of such a fund for the endowment of postgraduate education for the general practitioner as an activity of the MSMS. I recommend that the House of Delegates instruct The Council to set aside an amount equal to ten thousand dollars to start this fund and additional sums each year until such time as the fund is sufficient to endow postgraduate education. This fund could receive other monies and bequests from our membership and lay benefactors. Several have already expressed their wish to donate to such a fund if once initiated by the Society.

### Finis

Mr. Speaker and House of Delegates, I appreciate the honor of being President and I hope I have lived up to your expectations. After fifteen years of service, I do not expect to drop my interest in the welfare of my profession. I shall still be very active in organized medicine.

THE SPEAKER: The address of the president will be referred to the Reference Committee on Officers' Reports.

I understand that Colonel Furlong is with us, and it is my pleasure to call on him at this time.

LT. COLONEL HAROLD A. FURLONG, M.D.: Mr. Speaker, Members of the House of Delegates: Last year, when I was called into military service, my first duty was to meet with your Medical Preparedness Committee and the members of the Executive Committee. That was a very pleasant occasion. I am sure that, had I known then what I know now about the Selective Service, I wouldn't have looked forward so eagerly to this year.

It is a very unusual honor that you have bestowed upon me this morning to attend a meeting of the House of Delegates. I frankly asked for that permission in order that I might express officially to the medical profession of Michigan the thanks of the Governor and the Selective Service System of Michigan for the very vital part that the doctors of medicine have played in this program. It has been pleasant to coöperate most closely with all the facilities that organized medicine in Michigan had to offer. We have received most excellent help from the executive office, under Mr. Burns. The M.S.M.S. JOURNAL has been very helpful; the Executive Committee and The Council have been very helpful. The tremendous load that the doctors of Michigan have borne in the past year, in carrying out this program, surpasses all imagination. Over 130,000 examinations have been performed. About 50,000 men have been taken into the Selective Service in Michigan. Not only the immediate facilities of the State Medical Society but the Department of Health and other agencies, such as the Michigan Hospital Association and the Board of Registration in Medicine have been most helpful.

The name of every doctor who has been appointed in Michigan to service on Selective Service has been cleared through the Board of Registration in Medicine. I think you can see what that has meant. There have been 1,451 doctors of medicine serving as examiners for local boards. Three hundred eighty-six men have served on the medical advisory boards, and there are nineteen doctors, one on each of the nineteen appeal boards, a total of 1,856.

There have been, I am sure, many occasions when the doctors of Michigan were somewhat annoyed by the heavy load that has been placed upon them at various times. It was not possible for us to give you all that you wanted in the way of supplies.

We are very carefully recording the results of your work, and we anticipate that, when this program is through in Michigan, we will have enough records, carefully kept and tabulated, that a very comprehensive study may be made of the physical condition of registrants.

In fact, people who come here from national headquarters and look over what we are doing in the way of tabulating this information for the State of Michigan indicate very clearly that we are doing a better job than even the national government itself is undertaking.

Tomorrow the official representative of the national headquarters of Selective Service is coming here primarily to express appreciation for your assistance.

Another job has been assigned to me, that of Administrator to the State Council of Defense. I can assure you that, in addition to the heavy load which you have been called upon to give for Selective Service, you will be invited to give advice and help in organizing all the medical resources of the State of Michigan that will be necessary under the civilian defense program.

Again I want to express to you my appreciation for the privilege of appearing before you this morning, and my very profound admiration for the work that the Michigan doctors of medicine have done in national defense.

THE SPEAKER: Thank you, Colonel Furlong.

Our next order of business is the President-elect's address, Henry R. Carstens, M.D.

## II. President-Elect's Address

With this, the Seventy-Sixth Annual Meeting, the Michigan State Medical Society completes three-quarters of a century of able service to the citizens of this state and to the medical profession which serves them. The record is long and honorable, and of it we may justly be proud. The speaker, naturally, has a deep feeling of gratitude for the honor which his fellow practitioners will bestow upon him this week.

The activities of the Michigan State Medical Society in the scientific phase of the practice of medicine are well known and need not be repeated here. The splendid program which will be presented at this meeting is but one manifestation of the educational program of the State Society, both for its members and for the public. The complete list of activities of the Society cannot be covered on this occasion, but in brief, one or two items merit special mention.

The first is concerned with the project, which was the result of many years' study of some of the inequalities in the distribution of medical care. For over ten years, the Society has made a thorough study of this problem; this study culminated in the sponsorship of Michigan Medical Service, the nonprofit corporation which makes provision for the budgeting of the costs of medical care by means of small monthly payments. The plan has now been in active operation for eighteen

months, and gives every evidence of serving the three-fold purposes for which it was founded. These were (1) to make available to the citizen of the moderate income group, medical services of which he might be in need, without disruption of his budget through unforeseen incurrment of substantial and unexpected financial obligations. At the same time (2) the physician is assured of fair compensation for his services. And, finally (3) such a plan of voluntary protection (based upon insurance principles) by the individual himself, will help to forestall the proposals of those who feel that some compulsory health insurance plan is the only solution.

In accordance with the instructions of the House of Delegates, operations were started on March 1, 1940. Although plans were carefully made in advance, it was inevitable that there would be numerous unforeseen problems arising after the plan was actually in operation. Some of the difficulties seemed insurmountable, but due to the earnest and conscientious work of the Board of Directors and its Executive Committee, Michigan Medical Service has solved the great majority of problems as they arose and the plan has grown rapidly in the last eighteen months. Many problems still remain for solution in the present and in the near future. One of these problems is the rapid growth mentioned, the number of subscribers having increased in the short space of time up to approximately 193,000 individuals as of this date. All indications point to the fact that the program is soundly planned and appears to be an answer, in large part, to some of the problems of the distribution of medical care. As further evidence, it is noted that in all parts of the nation, the medical profession is watching the progress of the Michigan plan and has started similar plans with a view to solving the problems in their own communities. Well over half of the states now have started plans or have completed the ground work which will permit them to start their plans within a short time. The whole program comprises a great social experiment with every indication pointing to its success in solving some of the major medical economic problems of our citizens.

The full details will be presented tomorrow afternoon in the reports at the meeting of the membership of Michigan Medical Service, the membership including the delegates of this House.

Another major matter which will be of increasing importance and which will require more and more study by the Michigan State Medical Society during the next year or two is the matter of the national defense. With the kaleidoscopic changes in the picture of world affairs, it is not remotely possible to forecast what the future will bring. In the meantime, it may be stated that the medical profession of this state has already performed notably in the nation's program for national defense.

Almost 2,000 physicians have served, without remuneration, on the Selective Service local examining boards and district advisory boards; they have put in long hours of conscientious work in this service. In addition, many of our physicians, particularly the younger ones, are already on active service. Some are serving in the navy and with the marines, many are on duty with the national guard. The profession may well be proud of the large number of its members who hold appointments in Reserve Corps of the army. Michigan has always been among the leaders in this respect. There are at present over 400 physicians in this state who hold appointment as medical reserve officers. Of these, approximately 250 are on active duty. Of the balance, the great majority are completing internships, are senior officers, or are assigned to War Department units, so that actually there are hardly a score at the present moment available for assignment in the Michigan Military Area.

This is a record in which the medical profession may take pride. And still, due consideration must be given to needs which the future may bring in the event of an even greater national emergency. With every confidence, one may state that the medical profession of Michigan will rise to the emergency as they have during previous wars that have occurred since the founding of our Society.

There are many other activities which will occupy the Society during the coming year. Particular attention may be drawn to the reports of the many committees. Their industrious members have accomplished much during the past year, and most of the committees have long range programs which will occupy our attention for the coming year and even further in the future.

During its long and honorable history, the Michigan State Medical Society has been confronted with innumerable problems, and these have been studied and solutions found to the best interest of the citizens of this state and the practice of medicine. In the future, there will be even more problems. I know that every one of us has every confidence that the correct solution will be found in the earnest deliberations of the Society's governing body, the House of Delegates, and the able activities of its executive body, The Council, and the Officers. May our State Society prosper and long continue into the future its enviable and honorable record.

THE SPEAKER: The address of President-elect Carstens will be referred to the Reference Committee on Officers' Reports.

The next order of business is the annual report of The Council, A. S. Brunk, M.D.

## III. Annual Report of the Council

Mr. Speaker and Members of the House of Delegates:

The Annual Report of The Council for the year 1940-41 appears in the Delegates' Handbook beginning at page 29. As this report was written in July in order that it might appear in print, we wish to submit additional information on matters which have been considered by The Council and its Executive Committee during the past two months.

1. *Membership.*—The membership of the Michigan State Medical Society, as of September 12, 1941, totals 4,432, including 82 military members who were granted a remission of dues.

2. *Michigan Medical Service.*—The enrollment in Michigan Medical Service has increased to 193,186 as of August 31, 1941. In addition to this widespread acceptance of the program by the public, it is refreshing to observe that the number of participating doctors has increased each month, until at present 3,559 are registered, which is approximately 90 per cent of the total number of licensed practicing physicians in Michigan.

The benefits of the program are well established, both for the patients and the doctors. The great flexibility of services means more adequate care for the patients and greater remuneration for the doctors.

Services have been provided for more than 29,000 patients, and payments in excess of $650,000 have been paid to doctors for these services. Complete data as to the expansion of Michigan Medical Service will be presented at the meeting of the members.

3. *Medical Relief.*—The administration of medical relief to those on Welfare is still in a chaotic condition, being complicated by the ruling of the Michigan Crippled Children Commission re fee schedule.

From the Secretary's Report presented to the Delegates last evening (September 15), it would appear that at least one-third of our county medical societies have *lower* fee schedules for medical care of indigents (including afflicted adults) than the present fee schedule of the Crippled Children Commission, which at best represents only the *cost price* of rendering these services to wards of Government. Therefore, the physicians in some twenty-two Michigan counties are working under fee schedules that represent a return of *less* than the cost of performing the services! ! !

Much work by our county medical societies re medical relief is indicated. In fact, it is felt that this is the major problem facing the Michigan medical profession today. If it is not solved, quickly and satisfactorily, it will be reflected in our private practices.

Michigan's Welfare Law of 1939 set up the cardinal principle of the physician-patient relationship (free choice of physician by welfare patients). This law is *not* being complied with in some counties. A recommendation on this matter follows.

4. *Authorization to Levy Assessments.*—In 1938, 1939 and again in 1940, the House of Delegates authorized The Council to levy an assessment of $5.00 on every member of the M.S.M.S., as seemed justified in the opinion of The Council. The Council is gratified at your confidence and is happy to state that matters were so well arranged by its Finance Committee that no direct assessments were required during the last three years. A recommendation on this subject follows.

5. The Intangibles Tax Law of 1939, has, since its enactment, been a source of confusion and annoyance to thousands of Michigan citizens who have attempted to comply with its complicated provisions. This of course includes members of the medical profession. Most of us were sorry that the attempt to repeal the law made in the 1941 Legislature by Senator Earl W. Munshaw, did not meet with success; such action would have resulted in the enactment of a better and less complicated statute.

Some Michigan lawyers have advised individual physicians that they were not responsible for the payment of intangible taxes on accounts receivable as these represented *personal services.* This question came up on several occasions, with the result that The Council ordered that a legal opinion be secured. This was obtained, and is on file in the executive office at Lansing.

**Recommendations**

The Council's first five recommendations are published in the Handbook on page 39. I shall read them to reinvite them to your attention:

1. That favorable consideration be given to a resolution expressing appreciation and gratitude to members of the Michigan Legislature and to the Governor for their courteous reception extended representatives of the medical profession, and the thoughtful consideration they gave to medical and health measures coming before them.

2. That the State Society develop, or join in the development of, some plan of rehabilitation of rejected draftees, in which the physician-patient relationship and free choice of doctor is maintained.

3. That county societies having arrangements whereby medical welfare (including afflicted adult) care is given at less than cost price, be urged immediately to study and revise their schedules of benefits so that individual members are not penalized by being forced to perform services at a financial loss.

4. That approval be given by the House of Delegates of the resolutions of the state's fifty-five county medical societies recommending renewal of the Charter of the Michigan State Medical Society.

5. That the recommendations of the special committee appointed to study the problem of election of delegates and alternate delegates to the A.M.A. be favorably considered.

* * *

The Council offers these additional recommendations, covering matters presented in this Supplementary Report:

6. That aggressive action be taken by county medical societies, where indicated, to the end that county social welfare boards comply with the Michigan Welfare Law of 1939 re free choice of physician by welfare patients. Further, that county societies contact their Boards of Supervisors before October 1, on which date their annual budgets will be adopted.

7. That the House of Delegates reaffirm its authorization to The Council to levy a capital assessment, or assessments, not to exceed a total of $5.00, as seems justified in their considered opinion.

* * *

THE SPEAKER: The annual report of The Council and the supplemental report will be referred to the Reference Committee on Reports of The Council.

We will now have the report of Delegates to American Medical Association, by Dr. Luce.

# IV. Report of Delegates to A.M.A.

HENRY A. LUCE, M.D.: The report of the Delegates to the A.M.A. is printed in the Handbook. No additional reports are necessary, no matters having transpired.

THE SPEAKER: This report will be referred to the Reference Committee on Officers Reports.

The Speaker will now declare a recess of five minutes.

*(Recess.)*

THE SPEAKER: The House will please be in order.

The next item of business is the offering of resolutions.

# V. Resolutions

DEAN W. MYERS, M.D. (Washtenaw): Mr. Speaker, in accordance with the recommendation of The Council, presented by Chairman Brunk, I wish to offer this resolution:

## V-1. APPRECIATION TO MICHIGAN LEGISLATURE AND GOVERNOR

RESOLVED, that the House of Delegates of the Michigan State Medical Society, in session September 16, 1941, place on its minutes an expression of appreciation to the members and the officers of the Michigan Legislature, and to His Excellency, The Governor, for the courteous reception extended to the representatives of the medical profession and for the thoughtful consideration they have given medical and public health measures that have come before them this year.

O. D. STRYKER, M.D.,
*Speaker of the House of Delegates.*

Attest:
L. FERNALD FOSTER, M.D., *Secretary.*

THE SPEAKER: That resolution will be referred to the Reference Committee on Resolutions.

## V-2. SPECIAL MEMBERSHIP (EMERITUS, RETIRED, HONORARY)

FRED DRUMMOND, M.D. (Bay-Arenac-Iosco):

WHEREAS, Charles W. Ash, M.D., of Bay City, Michigan, Member of the Bay County Medical Society, has fulfilled the requirements for Retired Membership of the Michigan State Medical Society as provided in Article three (3), Section six (6), of the Constitution,

BE IT RESOLVED, that the House of Delegates transfer *Dr. Ash* to the *Retired* Membership roster.

WHEREAS, C. M. Swantek, M.D., of Bay City, Michigan, member of the Bay County Medical Society, has fulfilled the re-

quirements for "Retired Membership" of the Michigan State Medical Society as provided in Article three (3), Section six (6), in the Constitution,

BE IT RESOLVED, that the House of Delegates transfer *Dr. Swantek* to the *Retired* Membership roster.

A. E. STICKLEY, M.D., Ottawa:

"WHEREAS, A. Leenhouts, M.D., of Holland, Michigan, has been in the active practice for over 50 years and has been a member of the County and State Medical Societies for more than 25 years, be it resolved that the status of A. Leenhouts, M.D., now be that of Emeritus Member of the Michigan State Medical Society."

R. A. SPRINGER, M.D., St. Joseph:

WHEREAS, J. H. O'Dell, M.D., of Three Rivers, Michigan, has fulfilled the requirements for Retired Membership,

BE IT RESOLVED, that he be accorded Retired Membership privileges.

DONALD R. BRASIE, Genesee:

WHEREAS, C. H. O'Neil, M.D., of Flint, Michigan, has retired from the active practice of Medicine and Surgery, having been an active member of the Genesee County Medical Society for the past thirty years,

BE IT RESOLVED, that C. H. O'Neil, M.D., be placed on the Retired Membership list of the Michigan State Medical Society.

M. G. BECKER, M.D., Gratiot-Isabella-Clare:

WHEREAS, Fred J. Graham, M.D., Alma, has been in practice for fifty years, and

WHEREAS, he has been a member in good standing of the Gratiot-Isabella-Clare County Medical Society for twenty-five years, and

WHEREAS, he has been unanimously recommended by the Gratiot-Isabella-Clare County Medical Society, we wish to present his name for your favorable consideration, for Emeritus Membership.

FRANK O. NOVY, M.D., Saginaw:

WHEREAS, M. D. Ryan, M.D., Saginaw, has been in practice for fifty years, and

WHEREAS, he has met all requirements for Emeritus Membership,

BE IT RESOLVED, that he be granted such membership in the Michigan State Medical Society.

THE SPEAKER: All resolutions relative to special memberships will be referred to the Reference Committee on Resolutions.

# VI. Amendments to Constitution and By-laws

## VI-1. BY-LAWS, CHAPTER 1, NEW SECTION 7, RE: TRANSFER OF MEMBERSHIP TO ANOTHER STATE SOCIETY

E. D. SPALDING, M.D. (Wayne): Amend Chapter I by adding a section to be known as Section 7.

Sec. 7. Resignation for transfer of membership to another State Society shall be effected in the following manner:

Any member in good standing, not facing charges of unethical conduct, whose State and County dues are not in arrears, and who has moved his home or office to another State, may tender his resignation, which shall be effective at the beginning of the next quarter. Such resignation shall be received and accepted by the State Secretary, who shall give the departing member certification of good standing.

Provided the portion of the calendar year following such resignation is not less than one-quarter, the secretaries of the State and County societies shall refund any dues already paid for the remainder of the year, calculated to the nearest quarter.

THE SPEAKER: That will be referred to the Reference Committee on Amendments to Constitution and By-Laws.

A. L. CALLERY, M.D., St. Clair:

## V-3(a). RE: MICHIGAN MEDICAL SERVICE

At a regular meeting of the St. Clair County Medical Society, Tuesday evening, September 9, 1941, at Port Huron, Michigan, after a lengthy discussion of the Michigan Medical Service, participated in by a majority of members present, a motion was made and carried by a vote of 25 to 1 (five members not voting), voicing their disapproval of the manner in which the service of this organization is functioning. The following resolution was prepared and the delegate instructed to present it at this meeting.

WHEREAS, Michigan Medical Service has not been functioning to the satisfaction of the members of the medical profession, and

WHEREAS, Fees have been reduced to a figure which is not commensurate with the services rendered, and even lower than agreed upon, and are slow in being paid or not paid at all, and

WHEREAS, Members participating in this service are being accepted by Michigan Medical Service in higher income brackets than originally agreed upon, and

WHEREAS, In our opinion, instead of helping the physicians of St. Clair County, our services are being actually cheapened by the fees paid, and that we are worse off by participating in this Service than we were before its organization, and for this reason many of our members have cancelled their enrolment, and

WHEREAS, In our opinion services being rendered by old line Insurance companies are far more satisfactory to everyone,

THEREFORE, BE IT RESOLVED, that our delegate be instructed to present this Resolution to the House of Delegates and members of Michigan Medical Service urging the discontinuance of Michigan Medical Service in its entirety.

A. L. CALLERY, M.D.: I have carried out my instructions.

THE SPEAKER: The resolution offered by Dr. Callery will be referred to the Reference Committee on Reports of The Council.

DONALD R. BRASIE, M.D.: Mr. Speaker and Gentlemen: I have here on the table a lengthy resolution of the Genesee County Medical Society reiterating again their objections to Michigan Medical Service. We were all through it last night. I don't think it needs repetition. I might say we think Dr. Luce is a very excellent red flag waver. He at least has the courage of his convictions on that. We don't feel that the dangers are quite as urgent. We don't feel that it is necessary in good times, in a well-paid group, to reduce our usual fees 25 per cent under the average in our county, which Michigan Medical Service represents. We do not feel that this hits the low income group.

Dr. Carstens, last night, made the first admission that, perhaps, it was the moderate income group. Incidentally, one reason we are so concerned, gentlemen, is because the group that is now insured in the Medical Service represents 90 per cent of our practice in Genesee County. It does not represent three or four cases, as some of the men have had, who are so much in favor of Michigan Medical Service. It represents 90 per cent of our practice, and it represents a fixation of a top fee.

HENRY A. LUCE, M.D.: Mr. Speaker, I rise to a point of order. In introducing a resolution, is it the ruling of the Chair that a man makes an argument about his resolution?

THE SPEAKER: No, it is not. You preceded me a few moments. I think the resolution should be offered and discussion held over until after the report of the Reference Committee.

DONALD R. BRASIE, M.D.: I stand corrected. I am sorry. I was only trying to explain why it was put in. These are the resolutions we were instructed to present.

## V-3(b). RE: MICHIGAN MEDICAL SERVICE

BE IT RESOLVED, that the House of Delegates of the Michigan State Medical Society liquidate the Michigan Medical Service Plan as and when the present contracts terminate.

THE SPEAKER: That resolution will be referred to the Reference Committee on Reports of The Council.

## V-3(c). RE: MICHIGAN MEDICAL SERVICE

DONALD R. BRASIE, M.D.:

BE IT RESOLVED, that no policy or policies of Michigan Medical Service be sold to any married person having an annual income above $2,000.00 and any single person having an annual income above $1,000.00.

THE SPEAKER: This resolution will be referred to the Reference Committee on Reports of the Council.

## V-3(d). RE: MICHIGAN MEDICAL SERVICE

DONALD R. BRASIE, M.D.:

BE IT RESOLVED, that the House of Delegates of the Michigan State Medical Society instruct the officials and directors of Michigan Medical Service to make no direct or indirect attempts to sell, or in fact, to sell a policy or policies to persons employed in those counties in which the component county society is opposed to such action.

THE SPEAKER: This resolution will be referred to the Reference Committee on Reports of The Council.

## V-3(e). RE: MICHIGAN MEDICAL SERVICE

DONALD R. BRASIE, M.D.:

BE IT RESOLVED, that the personnel, principles and practices of the sales organization of the Michigan Medical Service Plan in any given county be under the direct supervision of that county medical society.

THE SPEAKER: This resolution will be referred to the Reference Committee on Reports of The Council.

## VI-2. CONSTITUTION, ARTICLE III, SECTION 4, RE: HONORARY MEMBERS

C. L. HESS, M.D. (Bay-Arenac-Iosco): I have several resolutions that concern the Constitution and By-Laws, the object being to clarify certain sections and improve others.

WHEREAS, the Constitution in Article three (III), Section four (4), provides for Honorary Members of the State Society but does not state whether or not they shall pay dues, vote, or hold office,

BE IT RESOLVED, that Article three (III), Section four (4) of the Constitution have added the following sentence:

"Honorary Members shall pay no dues to the State Society and shall be without right to vote or hold office in either County or State Society."

THE SPEAKER: This amendment to the Constitution will be referred to the 1942 Session of the House of Delegates.

## VI-3. CONSTITUTION, ARTICLE IV, SECTION 3, RE: OFFICERS AND THE HOUSE OF DELEGATES

C. L. HESS, M.D.:

WHEREAS, Article four (IV), Section three (3) of the Constitution provides that officers of the Society and members of The Council shall be members of the House of Delegates, and whereas, Past Presidents can be made members of the House of Delegates only by replacing other desirable delegates in Annual County Society Elections, and whereas, Past Presidents should be members to make more certain the continued benefit of their wisdom and experience in the House of Delegates,

THEREFORE, BE IT RESOLVED, that Article four (IV), Section three (3) of the Constitution have added the following sentence:

The past presidents shall be members at large of the House of Delegates during the first five (5) years of their past presidency with right to vote and hold office."

THE SPEAKER: This resolution will be referred until the 1942 Session of the House of Delegates.

## VI-4. CONSTITUTION, ARTICLE IV, SECTION 5, RE: ELECTIONS BY THE DELEGATES

C. L. HESS, M.D.:

WHEREAS, Article four (4), Section five (5) of the Constitution states that the House of Delegates shall elect certain officers, Council members, American Medical Association delegates, and further, such other officers as the House may require, and whereas, in this section Delegates to the American Medical Association might be classified as officers,

BE IT RESOLVED, that Article four (4), Section five (5) be rearranged to read as follows:

"The House of Delegates shall at the regular annual session, elect the President-elect, a Speaker, and Vice Speaker of the House of Delegates, Members of The Council, and such other officers as may be created by the House of Delegates, unless otherwise specified in the Constitution and By-Laws. It also shall elect delegates and Alternate Delegates to the American Medical Association."

THE SPEAKER: This amendment to the Constitution will be referred until the 1942 Session.

## VI-5. CONSTITUTION, ARTICLE X, SECTION 1

## RE: CLARIFICATION OF "SESSION" AND "MEETING"

C. L. HESS, M.D.:

WHEREAS, the House of Delegates has now under consideration an amendment clarifying the words "Session" and "Meeting";

BE IT RESOLVED, that contingent to the adoption of this amendment Article ten (10), Section one (1), 3rd sentence, of the Constitution have the word *"Session"* changed to *"Meeting"* and read as follows:

"A majority of all the members present at that *meeting* shall determine the question and be binding."

C. L. HESS, M.D.: Instead of saying "a majority of members present at that Session."

THE SPEAKER: This shall be referred to the 1942 Session.

## VI-6. BY-LAWS, CHAPTER 3, SECTION 1, RE: CLARIFICATION OF "MEETING" AND "SESSION"

C. L. HESS, M.D.:

"Chapter 3—Section 1: "The House of Delegates shall meet annually at the time and place of the Annual Session and may hold such number of *Meetings* as the House may determine or its business require, adjourning from day to day as may be necessary to complete its business and specifying its own time for the holding of its *Meetings*."

## VI-7. BY-LAWS, CHAPTER 3, SECTION 7-L, CHANGING WORD "SESSION" TO "MEETING"

"Chapter 3, Section 7, Paragraph L, 1st sentence: "No new business shall be introduced in the last *meeting* of the House of Delegates without the unanimous consent of the delegates, except when presented by The Council."

THE SPEAKER: This will be referred to the Committee on Amendments to the Constitution and By-Laws.

## VI-8. BY-LAWS, CHAPTER 3, SECTION 2, RE: QUALIFICATIONS OF HOUSE OF DELEGATES

C. L. HESS, M.D.:

WHEREAS, Chapter three (3), Section two (2) of the By-Laws requires two (2) years membership for a delegate and whereas, he should be an active member,

BE IT RESOLVED, that Chapter three (3), Section two (2), of the By-Laws be amended to read as follows:

"A Delegate must have been an *active* member of the Society for at least two (2) years preceding his election."

THE SPEAKER: This will be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

## VI-9. CONSTITUTION, ARTICLE III, SECTIONS 3 AND 5, RE: ASSOCIATE AND JUNIOR MEMBERSHIPS

C. L. Hess, M.D.:

Whereas, Article three (III) of Section three (3) of the Constitution provides Junior Membership for interns, and Section five (5) of the same article provides Associate Membership for interns, and

Whereas, when these Sections were adopted the Associate Membership provision had been recommended,

Be it resolved, that Article three (III), Section three (3) of the Constitution, referring to Junior Membership be deleted and the subsequent sections numbered 4 to 8 in Article three (III) be numbered 3 to 7, respectively.

The Speaker: This will be referred to the 1942 Session of the House of Delegates.

## VI-10. BY-LAWS, CHAPTER 5, SECTION 1, RE: ANNUAL MEETING OF THE COUNCIL

C. L. Hess, M.D.:

Whereas, The fourth sentence of Chapter five (5), Section one (1) of the By-Laws reads as follows;

"Its annual meeting shall be held coincident with the annual meeting of the Society."

Whereas, This sentence conflicts with the time of the annual meeting of The Council in January as provided in the Constitution, Article eight (VIII), Section two (2);

Be It Resolved, that the above fourth sentence of Chapter five (5), Section one (1) of the By-Laws be deleted.

The Speaker: That will be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

C. L. Hess, M.D.: I have two resolutions that should be adopted together, one to the Constitution and one to the By-Laws.

The Speaker: You can't do that, Doctor. The other one cannot be handed in until next year.

C. L. Hess, M.D.: I think in this case the By-Law can be adopted this year, if acceptable to the delegates, without conflicting with the Constitution.

## VI-11. CONSTITUTION, ARTICLE V, SECTION 1, RE: OFFICERS AND THE COUNCIL

C. L. Hess, M.D.:

Whereas, Article V of Section 1 of the Constitution provides in the third sentence that the President, the President-Elect, the Secretary and the Treasurer shall be members of The Council but in the fifth sentence denies their right to vote,

Be it resolved, that these fifth and sixth sentences of Article V, Section 1 be deleted, which read as follows:

"The President, the President-elect, the Secretary and the Treasurer shall be ex officio members and without right to vote. The Speaker of the House of Delegates shall be a member of The Council and of its Executive Committee with power to vote."

C. L. Hess, M.D.: That last sentence is taken care of in the next resolution. In that case the wording of the article is such that the officers mentioned are members of the Council, with right to vote.

The Speaker: That will be referred to the 1942 Session of the House of Delegates.

## VI-12. BY-LAWS, CHAPTER 5, SECTION 1, RE: EXECUTIVE COMMITTEE OF THE COUNCIL

C. L. Hess, M.D.:

Whereas, Chapter 5, Section 1 of the By-Laws refers to elections in the Council,

Be It Resolved, that the third sentence of Chapter 5, Section 1 of the By-Laws be changed to read as follows:

"It shall elect to serve one year, its Chairman, Vice-Chairman, Chairman of the Finance Committee, Chairman of the County Societies Committee, and Chairman of the Publication Committee, who with the President, the President-Elect, the Secretary and the Speaker of the House of Delegates shall constitute the Executive Committee, and

Be It Resolved, that the last sentence of this Section 1 of Chapter 5 be deleted, referring to the appointment of an Executive body.

The Speaker: This resolution will be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

## V-4. RE: ELECTION OF DELEGATES TO A.M.A.

Wm. S. Reveno, M.D. (Wayne): I have a resolution that is designed to balance the election of the number of delegates to the American Medical Association.

Be it resolved, that in order to balance the number of delegates and alternates to be voted on each year, one of the four A.M.A. Delegates whose terms expire in 1942, viz.: Drs. Luce, Gruber, Reeder or Keyport be asked to resign (with the assurance of reëlection), and immediately be reëlected for a term of two years. The Speaker is to draw the name of the delegate selected as the martyr. In this manner two delegates will be voted on at this year's meeting and three at the next.

The Speaker: This resolution will be referred to the Reference Committee on Resolutions.

## VI-13. BY-LAWS, CHAPTER 3, SECTION 7(d) RE: ELECTION OF DELEGATES AND ALTERNATES TO A.M.A.

Wm. S. Reveno, M.D.:

"It shall elect Delegates and Alternate Delegates to the American Medical Association in accordance with the regulations of that parent organization.

"The number of alternate delegates shall equal the number of delegates to the American Medical Association. Delegates and Alternates shall hold office for two years.

"At each annual election, candidates for delegates and alternates shall be nominated in number equal to or greater than the number to be elected. Election shall be by ballot. The required number of high candidates shall be declared elected.

"In case of a tie vote between any number of high candidates, the Speaker and Vice-Speaker shall vote on the two candidates alphabetically first, each filling out a secret ballot, one of which shall be drawn at random by the chief teller. The defeated candidate shall then be paired with the next alphabetically following candidate and ballots cast in the same manner. This process is to be repeated until all ties have been resolved.

"Alternate delegates shall have relative seniority according to the respective number of votes received by them, and such seniority rank shall be designated at the time of election. Alternate delegates serving their second year in office shall hold seniority over those alternates serving their first year in office.

"Any vacancies caused by failure or inability of any delegates to attend shall be assigned to alternate delegates in the order of their seniority as defined in this section."

The Speaker: This proposed amendment to the By-Laws will be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

## V-5. RE: PROFESSIONAL LIAISON COMMITTEE

Allan McDonald, M.D. (Wayne);

Whereas, in unity there is strength, and

Whereas, the allied professions of Dentistry, Pharmacy and Medicine have much in common and their conduct toward the public is guided by similar ethics; and

Whereas, the experience in Wayne County during the past two years has demonstrated the value of the collaboration of these groups;

Be it resolved, that the House of Delegates of the Michigan State Medical Society request their Executive Council to appoint a committee of three members to be known as the "3 D's Liaison Committee" (Doctors, Druggists and Dentists), and that The Council further contact the Michigan State Dental Society and the Retail Druggists Association asking them to appoint similar committees to the end that: (a) A feeling of unity and mutual understanding be developed; (b) That useful information may be quickly and accurately imparted; (c) That aid may be promptly given in finding solutions to problems of these groups (both professional and economic); (d) That desirable legislation may be fostered; and (e) That pernicious legislation may be more effectively combatted, all for the public good.

The Speaker: This resolution will be referred to the Reference Committee on Resolutions.

## V-6. RE: SECTION ON GENERAL PRACTICE

HENRY A. LUCE, M.D. (Wayne):

WHEREAS, sixty-six and two-thirds per cent (66⅔%) of the doctors of medicine of this state are general practitioners, and these general practitioners constitute the bulk of the membership of the Michigan State Medical Society, and

WHEREAS, General Practice is an entity of and by itself within the profession, is definite in its comprehension and limitless in its extension, and

WHEREAS, no place has been provided on hospital staffs through which General Practitioners would be enabled to submit their evidence of special training in certain fields of medicine and surgery which would qualify them before the public as proficient therein, and

WHEREAS, General Practitioners have a special interest in medical legislation, administration and jurisprudence, which justifies their particular voice being officially heard, and

WHEREAS, it is not the desire of the General Practitioner to disrupt the splendid variety and calibre of scientific programs of the M.S.M.S. but rather to create a new and proper basis for separate registration, representation and participation in the general activities of the organization, and

WHEREAS, the people of the state will be inclined to view with favor and good will the official recognition of their family physicians as a distinct part of the Michigan State Medical Society, and

WHEREAS, the specialty fields are overcrowded with general practitioners classified as specialists only because there is no proper classification for them, and

WHEREAS, the establishment of an official Section on General Practice in the M.S.M.S. will stimulate a more active interest and coöperative attitude among the profession generally, making far greater unity in the advancement of the organization's programs, and

WHEREAS, The Council of the Wayne County Medical Society has gone on record as endorsing the introduction of these resolutions for the creation of a Section on General Practice of the M.S.M.S., and

WHEREAS, efforts to date looking toward the creation of an official section of General Practitioners in the A.M.A. have met with approval for a trial period of one year;

THEREFORE, BE IT RESOLVED, that the House of Delegates of the M.S.M.S. take action at this time to create a new Section on General Practice to be duly constituted of equal rank and authority with the other sections already established.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

## V-2. RE: SPECIAL MEMBERSHIPS

L. G. CHRISTIAN, M.D. (Ingham):

WHEREAS, Doctors E. G. McConnell, C. V. Russell and H. S. Bartholomew have fulfilled all the requirements for Retired Membership in the Michigan State Medical Society,

BE IT RESOLVED, that the House of Delegates of the M.S.M.S. be instructed to authorize the Executive Office of the Michigan State Medical Society to place the names of Doctors McConnell, Russell and Bartholomew on its Retired Membership roster.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

## V-7. RE: NATIONAL PHYSICIANS' COMMITTEE

L. G. CHRISTIAN, M.D., read resolution regarding National Physicians' Committee.

WHEREAS, one of the most important functions of the medical profession on behalf of the public today is to apprise them of the true status of the medical services available to them, the accomplishments of those services in the past, and the necessity that those services be kept free from political control in the future; and

WHEREAS, The National Physicians' Committee for the Extension of Medical Service has been organized by our national leaders for just this purpose,

THEREFORE, BE IT RESOLVED, (1) that the Michigan State Medical Society hereby approve the program and proposed activities of the National Physicians' Committee for the Extension of Medical Service; and

(2) that the county societies comprising the Michigan State Medical Society are hereby urged to further the work of the National Physicians' Committee by an aggressive campaign to solicit funds and to acquaint every member of the profession with the necessity for such a program of public education.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

## V-2. RE: SPECIAL MEMBERSHIPS

HARRY F. DIBBLE, M.D. (Wayne):

The Wayne County Medical Society takes pride in recommending for Emeritus Membership the following distinguished physicians who have served the profession and the society with honor for many years; they all have been in the practice of medicine for fifty years or more and members of the State Society for at least twenty-five years:

Charles D. Aaron, M.D., Detroit, Michigan
Angus L. Cowan, M.D., Detroit, Michigan
Gilbert S. Field, M.D., Detroit, Michigan
George E. Frothingham, M.D., Detroit, Michigan
Wm. C. Martin, M.D., Detroit, Michigan
Irwin H. Neff, M.D., Detroit, Michigan
G. L. Renaud, M.D., Detroit, Michigan
Walter R. Parker, M.D., Detroit, Michigan
Joseph E. G. Waddington, M.D., Detroit, Michigan

The Wayne County Medical Society recommends that the following two physicians be placed on the Retired Membership rolls; they no longer are engaged in the practice of medicine:

Edward P. Newton, M.D., Detroit, Michigan
H. J. Hammond, M.D., Detroit, Michigan

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

## V-8. RE: PREMARITAL INSTRUCTION

C. F. DEVRIES, M.D. (Ingham):

WHEREAS, the family forms the basic structure of our American Civilization and culture; and

WHEREAS, it is felt that with present trends of education and human interest there exists an ever-increasing need and demand for the establishment of the family upon a basis of true understanding, normal relationships between husband and wife, mutual responsibilities to be assumed; and

WHEREAS, young men and women assume marital responsibilities with little or no knowledge of the fundamental basis thereof; and

WHEREAS, the divorce rate among American people has shown an alarming rate of increase during the past two decades, partially because of this lack of understanding; and

WHEREAS, it is felt that whenever possible premarital instructions should be made available to those contemplating marriage, and further that postmarital assistance and guidance should be similarly available to those already married; and

WHEREAS, the medical profession in general constitutes that group of society best qualified to furnish factual information concerning the physical relationships and responsibilities of marriage, though responsibility for the dissemination of such information has not always been accepted by the physicians,

THEREFORE, BE IT RESOLVED, that the House of Delegates of the Michigan State Medical Society recommend that those anticipating marriage be advised and encouraged to seek consultation and advice concerning these matters from their family physicians, preferably upon the occasion of examination for certification for marriage licensure; and

BE IT FURTHER RESOLVED, that physicians be requested to cooperate and prepare themselves to offer considerate and kindly guidance to those seeking such advice; and

BE IT FURTHER RESOLVED, that while it is appreciated that this friendly counsel will require some time on the part of the physician, new families will bring added grateful patients to such physician's practice, and that in view of this, fees commensurate with the economic status of the individual be charged for such consultation and advice.

THE SPEAKER: This resolution will be referred to the Reference Committee on Standing Committees.

## V-3(f). RE: MICHIGAN MEDICAL SERVICE

S. W. INSLEY, M.D. (Wayne):

WHEREAS, Michigan Medical Service is a movement of National significance and of great sociological value, and

WHEREAS, Michigan Medical Service was expected to go through a period of stress and strain, and

WHEREAS, it now appears that new and different approaches may be used to make the service plan even more workable,

THEREFORE, BE IT RESOLVED, that the House of Delegates of the Michigan State Medical Society, representing the physicians of Michigan, recommend that Michigan Medical Service take immediate steps towards study and placement in test operations (for comparative purposes) such new approaches as might be generally described as "limited liability" service contracts. These new approaches should also take up for reconsideration the limiting of benefits, increased subscription rates and control of distribution.

THE SPEAKER: This resolution will be referred to the Reference Committee on Reports of The Council.

### V-9. RE: TRAINING OF MEDICAL TECHNICIANS

R. H. Pino, M.D. (Wayne):

Whereas, emphasis during the past several years on insufficient distribution of medical care is now further stressed because the absorption of doctors of medicine into the Government service, provides a strategic time for such emphasis, and,

Whereas, taking advantage of this various inadequately trained groups are increasingly striving for recognition, claiming that they can fulfill the requirements for giving health care, not only to the civilian population, but in the Army, Navy, and Air Corps, and,

Whereas, capitulation to such requests would definitely retard for years to come the high standards attained in medical education and in medical care to the American people, and,

Whereas, the medical schools this year are increasing their enrollment by ten per cent to meet any ultimate deficiencies, and,

Whereas, the training of technicians to work under the direction of the doctor of medicine in our hospitals and in our laboratories and offices are proving to be a most helpful and efficient aid in the distribution of medical care, thus making it possible for more people increasingly to have the counsel and service of each doctor of medicine, and thus maintaining the high standards of medicine and the more complete distribution of medical care,

Therefore, be it resolved, that the House of Delegates of the Michigan State Medical Society representing the medical profession of Michigan, petition the American Medical Association through its House of Delegates that at their next annual meeting they take a positive stand not to capitulate to pressure groups who urge recognition of such indequately trained groups asking support and ethical recognition by the A.M.A.

Be it further resolved, that the Council on Medical Education and hospitals, and the Bureau of Medical Economics of the A.M.A., from the standpoint of education and increased distribution of medical care, be urged to make further study of the possibilities of the training of medical technicians in the various specialties, to work under the guidance of doctors of medicine in order that the privilege of medical care may come to more people through the increased assistance afforded the doctor of medicine.

Be it further resolved, that copies of this resolution be sent to the Headquarters of the A.M.A. in Chicago, to each member of the Michigan Delegation to the A.M.A., and that the Michigan delegates be instructed to introduce such a resolution to that body at the next annual meeting and also that copies be sent to the various state societies and they be urged to take similar steps in instructing their delegates.

The Speaker: This resolution will be referred to the Reference Committee on Officers' Reports.

### V-3(g). RE: MICHIGAN MEDICAL SERVICE

C. T. Ekelund, M.D. (Oakland):

Whereas, the first 18 months of operation of Michigan Medical Service has exacted a devotion of time and talent by its President and Executive Committee equal to that of the executives of a large insurance company, and

Whereas, Michigan Medical Service is, in point of fact, an insurance program,

Therefore, be it resolved, that the House of Delegates of the Michigan State Medical Society recommend that qualified executive personnel with administrative training and experience in the insurance field be added to promote efficient operation and make possible the collection of sound actuarial statistics, and

Be it further resolved, that a doctor of medicine be sought to serve as Medical Director preferably one from within the ranks of the Michigan State Medical Society.

The Speaker: This resolution will be referred to the Reference Committee on Reports of The Council.

Are there any more resolutions? If not, we will proceed to the next order of business, the reports of standing committees. First will be the Legislative Committee, Dr. Miller.

## VII. Reports of Standing Committees

### VII-1. LEGISLATIVE COMMITTEE

H. A. Miller, M.D.: Mr. Speaker and Members of the House of Delegates: Your Legislative Committee's report is found in the Handbook on page 48. There is very little to add.

I would bring your attention to some of the recommendations as made by the committee. You will note that during the year there were a number of bills that were considered, but no legislation passed during the last legislature inimical to the practice of medicine.

There is a particular recommendation made that I would invite to your attention, in regard to county medical societies acknowledging and helping the legislator in his work, showing him that you appreciate his activity. I have a letter from a small county, which I will not read in detail, a county society of sixteen active members, which held a meeting with thirteen members present. I will read just a portion of the letter, which states:

"Our Legislator was then presented with a solid gold, twenty-one jewel Lord Elgin wrist watch suitably engraved."

On June 13, as is customary, we sent letters from Lansing to various legislators who have helped us during the year. In one paragraph of this letter I, as Chairman of the Legislative Committee, stated:

"I shall do my utmost to transmit this appreciation and sense of gratitude to every one of the 6,142 doctors of medicine in Michigan, with the hope that these thanks will be more tangibly expressed in the future."

I believe the resolutions that have been presented here to thank all those who have aided in legislation during the last year are true expressions of our appreciation for good legislation.

Personally, I want to thank the members of my committee, the members of The Council, the members of the State Society, and everyone who has aided in our work this past year.

The Speaker: The report of the Legislative Committee will be referred to the Committee on Reports of Standing Committees.

The next will be the Committee on Distribution of Medical Care, Dr. Conover.

### VII-2. COMMITTEE ON DISTRIBUTION OF MEDICAL CARE

T. S. Conover, M.D.: Mr. Speaker and Members of the House of Delegates: The Committee on Distribution of Medical Care draws to your attention a change or an addition to paragraph 3 of its report as published, and that is in the resolution concerning general practitioners.

The Speaker: The report of the Committee on Distribution of Medical Care will be referred to the Reference Committee on Reports of Standing Committees.

### VII-3. MEDICAL-LEGAL COMMITTEE

T. E. Hoffman, M.D.: In the absence of the Chairman, I wish to report that the Medical-Legal Committee report stands as given on page 58 of the Handbook.

The Speaker: The report of the Medical-Legal Committee will be referred to the Reference Committee on Reports of Standing Committees.

### VII-4. REPRESENTATIVES TO THE JOINT COMMITTEE ON HEALTH EDUCATION

Burton R. Corbus, M.D.: Mr. Speaker, there are no additions to the report as given in the Handbook.

The Speaker: The report of this committee will be referred to the Reference Committee on Standing Committees.

### VII-5. PREVENTIVE MEDICINE COMMITTEE

The Speaker: Next will be the report of the Preventive Medicine Committee which is found in the Handbook on page 61 and will be referred to the Reference Committee on Standing Committees.

## VII-6. CANCER COMMITTEE

THE SPEAKER: This report as published on page 70 of the Handbook will be referred to the Reference Committee on Standing Committees.

## VII-7. MATERNAL HEALTH COMMITTEE

WM. S. REVENO, M.D.: Dr. Seeley has asked me to announce that Dr. Campbell is reading a detailed report on Friday at nine-thirty before the Section on Obstetrics and Gynecology, entitled "Facilities and Practices in Licensed Maternity Hospitals and Homes in Michigan."

THE SPEAKER: The remainder of this report will be found in the Handbook on Page 82, and the report will be referred to the Reference Committee on Standing Committees.

## VII-8. SYPHILIS CONTROL COMMITTEE

The report of the Syphilis Control Committee is also found in the Handbook on page 84 and will be referred to the Reference Committee on Standing Committees.

## VII-9. TUBERCULOSIS CONTROL COMMITTEE

This report is found in the Handbook on page 89 and will be referred to the Reference Committee on Standing Committees.

## VII-10. INDUSTRIAL HEALTH COMMITTEE

HENRY COOK, M.D.: There are one or two points that I would like to stress in this work.

The pioneer work of this committee started about two years ago. Certain matters have developed which we feel are important to the medical profession as a whole.

I would like to say that in our first meeting, the members of the committee had the feeling that the subject of industrial health had to do with those problems which were incident to employment. But in the program of industrial health, we wish to emphasize the fact as it is in the Handbook, that lost time in industry, 93 per cent last year in General Motors and about 90 per cent in all of industry, is due to non-occupational diseases and accidents which are the direct concern of the medical profession as a whole.

We also wish to invite your attention to the fact that over 60 per cent of industry in the State of Michigan is in plants of 500 or less. In the larger industries, the problems of industrial health are very well handled.

We also wish to invite your attention to the fact that if this problem is to be handled adequately, it is going to be handled by the coöperation of the medical profession, generally the family physicians, together with the employers and the manufacturers' association of the state. We have established relationships with the manufacturers' association, so that it is now willing to go ahead with the program as fast as we in the profession are ready to do it. We had meetings with the manufacturers' association which promised to contact the local associations, and through them, the medical profession in those communities, to work out a program of industrial health as the doctors would like to have it, and they are not going to dictate the manner of procedure.

Therefore, we have recommended an effort on an experimental basis in two counties in the state. One has it already in effect: another one has it under consideration. We hope to establish examples of industrial health coöperation and care, which may be followed by other counties.

If this comes up in your counties, we would like to urge that you give serious consideration to it. We must break down this feeling of the profession that the problem of industrial health is a problem of the industrial physician. His job is case finding only. Ninety per cent of the lost time is your problem, the care of your private case.

We would like to urge you to keep that in mind and give it your consideration. We have nothing further to report, but it did seem to me important enough to bring that to your attention, in order that the problem may be better understood.

THE SPEAKER: The report of the Industrial Health Committee will also be referred to the Reference Committee on Reports of Standing Committees.

## VII-11. MENTAL HYGIENE COMMITTEE

HENRY A. LUCE, M.D.: Mr. Speaker, one of the very best reports in the Handbook will be found on page 94. It is recommended for your attention.

THE SPEAKER: This will be referred to the Reference Committee on Standing Committees.

## VII-12. CHILD WELFARE COMMITTEE

FRANK VANSCHOICK, M.D.: Mr. Speaker and Members of the House of Delegates: This report is on page 73 of your Handbook. However, I wish to put a little between the lines, to guide you a bit in the future.

We have had two main activities in the past year. The first, as you well know, was coöperation with the Legislative Committee in formulating proposed legislation relative to the crippled and afflicted child. This entailed a tremendous amount of work. As you have already heard from the Legislative Committee, there was tremendous coöperation from all groups involved, not only the professional groups, but various lay groups which were contacted. We tried to formulate legislation which would bring and keep the practice of medicine, as it affected children, in the hands of the profession, where it belonged.

The other matter that I wish to bring to your attention is that this committee coöperated with several other agencies, state and lay, for the furtherance of medical knowledge throughout the state.

We have coöperated with the State Health Department, advised them as to the conduct of immunizing procedures throughout the state, kept immunizing procedures up to date, in light of the best accepted medical practice at the time.

We have prepared brochures on measles. There is one in process of preparation on whooping cough. Most of you recall having seen the one on measles which the epidemic this year called forth.

We have coöperated with the State Health Department and the Maternal Health Committee of this Society in furthering education on the care of the premature infant, and distributed incubators. We have had tremendous interest in the technical side of the manufacture of these incubators, and we feel that a really thorough, good job has been done.

THE SPEAKER: The report of the Committee on Child Welfare will be referred to the Reference Committee on Standing Committees.

## VII-13. IODIZED SALT COMMITTEE

FREDERICK B. MINER, M.D.: Mr. Speaker and Delegates: This is the nineteenth annual report of the Iodized Salt Committee. We have held but one meeting this year, due to the inactivity in Washington.

As you know, our Michigan Iodized Salt Committee has been before the Federal Food and Drug Administration for over a year, fighting more or less, but living in a state of doubt, not knowing what was going to be done to it.

At the time of our annual meeting last year, certain regulations had been published in the Federal Register, and a hearing was going on. We did not

introduce testimony until a representative of the Drug Division of that Administration introduced such poor testimony that we felt testimony should be introduced from Michigan. Consequently, on October 25, a twenty-five-page article of testimony was read by your Chairman at the hearing. This was compiled by a lawyer from the General Foods Corporation and a lawyer from the Salt Producers Association, also Mr. Wilcox, Chairman of the Standardization Committee of the Salt Producers Association, and myself.

Since our annual report was submitted for publication in your Handbook, the Federal Register of July 8 came out with final regulations on iodized salt. I am happy to say that the Michigan delegation has won two of its three points that it presented to the Federal Food and Drug Administration. An exception was made to iodized salt, giving us the liberty to use the iodine content that we advocate; also, the warning which they proposed putting on the label has been annulled. Nothing was said in the final regulations. However, we did lose the point that we contended for, publishing on the label the certificate which this Society granted your Iodized Salt Committee in 1923. No statement can be permitted on the label, of any therapeutic recommendation, and the poor customer who buys salt and asks the clerk waiting upon her why salt is iodized, may get an answer such as I did in North Branch, "It is because it is more sanitary." Canada has eliminated any therapeutic statement on its iodized salt.

No appeal was submitted to the final regulations, so that the regulations as published in the Federal Register of July 8 stand as an integral part of the Food, Drug and Cosmetic Act of our United States Government.

I want to invite your attention to another feature that we have been able to do this last year, which is to establish a national committee under the auspices of the American Public Health Association. This is a subcommittee under the Subcommittee on Evaluation of Administrative Practices of which Dr. Haven Emerson is chairman. Your Chairman heads the new Study Committee on Endemic Goiter.

A two-day conference was held in Detroit in June, and a 125-page book of proceedings of that two-day conference is being edited at present and will be presented to the A.P.H.A. meeting next month in Atlantic City. After that date and with their approval, they will be available to our Michigan committee.

However, that committee has said very many complimentary things about the work that Michigan has done in this preventive field of endemic goiter, and they have adopted, I may say, the Michigan plan of surveys and the Michigan plan of conducting their study in other states and in other localities throughout the United States.

I also want to say that they adopted the Michigan recommendation of reducing the amount of iodine from .02 of one per cent to .01 of one per cent of potassium iodide in the salt, providing that a suitable and effective stabilizer is used to maintain that iodine content in the iodized salt.

THE SPEAKER: The report of the Iodized Salt Committee will be referred to the Reference Committee on Standing Committees.

### VII-14. HEART AND DEGENERATIVE DISEASES

THE SPEAKER: This report will be referred to the Reference Committee on Standing Committees.

### VII-15. POSTGRADUATE MEDICAL EDUCATION

THE SPEAKER: This report as found in the Handbook will be referred to the Reference Committee on Reports of Standing Committees.

### VII-16. ETHICS COMMITTEE

THE SPEAKER: This report will be referred to the Reference Committee on Reports of Standing Committees.

### VII-17. PUBLIC RELATIONS COMMITTEE

THE SPEAKER: This report will be referred to the Reference Committee on Standing Committees.

Next is the report of special committees.

## VIII. Reports of Special Committees

### VIII-1. NURSES TRAINING SCHOOLS COMMITTEE

THE SPEAKER: This report will be referred to the Reference Committee on Reports of Special Committees.

### VIII-2. MEDICAL PREPAREDNESS COMMITTEE

### VIII-3. CONFERENCE COMMITTEE ON PRELICENSURE MEDICAL EDUCATION

BURTON R. CORBUS, M.D.: There is nothing to report on Medical Preparedness. We have met simply for organization. No matters of policy have arisen, and the work that has been done has been done by the Chairman who acts as a liaison between the American Medical Association.

The Prelicensure Committee I am somewhat embarrassed to report on. It, like the joint committees, has delegates to a committee which I head. There is nothing additional to report, but I do wish you would read the report on page 26 of the Handbook, because I see in the future of the Prelicensure Committee and the opportunity that is given to collaborate with the University of Michigan and Wayne University, the opportunity to come closer than we ever have before in planning to do something to work out this serious problem of internship, and the problem which has come before us of preparing men for licensure in the specialties.

THE SPEAKER: The reports of the Conference Committee on Prelicensure Medical Education and of the Medical Preparedness Committee will be referred to the Reference Committee on Reports of Special Committees.

### VIII-4. RADIO COMMITTEE

R. J. MASON, M.D.: In an attempt to acquaint part of the radio public with some of the problems of the medical profession, the Radio Committee, through the coöperation of the county societies, has had twelve broadcasting stations throughout Michigan carrying weekly programs on medical topics. Twenty-four such papers have been carried by these twelve stations.

These talks have been of fifteen minutes' duration. They have been given by a member of a local county medical society who has been introduced as a member of the Michigan State Medical Society, with his full name and title, and the title of his address. Further details are found in the Handbook, page 63.

THE SPEAKER: The report of the Radio Committee will be referred to the Reference Committee on Reports of Special Committees.

### VIII-5. ADVISORY COMMITTEE TO WOMAN'S AUXILIARY

R. C. JAMIESON, M.D.: Mr. Speaker, the Woman's Auxiliary required very little advice this year and, accordingly, there was no meeting held. The entire report is published in the Handbook on Page 92, and there is no supplementary report.

THE SPEAKER: The report of this committee will be referred to the Reference Committee on Reports of Special Committees.

### VIII-6. SCIENTIFIC WORK COMMITTEE

THE SPEAKER: This report, as published in the Handbook on page 33, will be referred to the Reference Committee on Reports of Special Committees.

We will now recess until three o'clock.

The meeting recessed at twelve-thirty o'clock.

## Tuesday Afternoon Meeting

### September 16, 1941

The second meeting convened at three-twenty o'clock, The Speaker, O. D. Stryker, M.D., presiding.

THE SPEAKER: The second meeting of the House of Delegates will now come to order.

Dr. Day, will you make a supplemental report?

LUTHER W. DAY, M.D.: Mr. Speaker, seated in the House now are 94 members, duly constituted delegates of the House of Delegates of the Michigan State Medical Society, which constitutes a quorum. There is no majority from any one county.

Mr. Speaker, there is a contention over one delegate. This morning, A. B. Smith, M.D., who was a delegate from Kent County, was unable to be here due to sickness. I seated W. C. Beets, M.D., as alternate. This afternoon Dr. Beets is not here, but Dr. Smith has risen from a sick bed and now seeks to be installed as delegate. What is the ruling?

THE SPEAKER: On page 108, Chapter 3—House of Delegates, Section 3, states:

"A delegate once seated shall remain a delegate through the entire session and his place shall not be taken by any other delegate or alternate, provided that in case of emergency the House of Delegates may seat a duly accredited alternate from his county society."

In line with this section, I can see no other course but that Dr. Smith would be denied a seat at this afternoon's meeting.

C. E. DUTCHESS, M.D. (Wayne): This appears to be a clear cut case of emergency. I move that the gentleman be seated.

THE SPEAKER: I have made a ruling, and I will welcome an appeal from my decision.

E. D. SPALDING, M.D. (Wayne): I appeal from the decision of the Chair.

T. K. GRUBER, M.D. (Wayne): It says "the House may seat a duly accredited alternate." He is not an alternate.

THE SPEAKER: Is there a second to Dr. Spalding's motion?

R. A. SPRINGER, M.D. (St. Joseph): I second it.

THE SPEAKER: It has been moved and supported that the decision of the Chair be appealed. Is there any debate?

J. J. O'Meara, M.D., Vice Speaker, assumed the chair.

THE VICE SPEAKER: Gentlemen, there is a motion before the house. What is your pleasure? Shall the ruling of the presiding officer be upheld? All in favor signify by the usual sign "aye"; against "no." The motion is lost and the Speaker is overruled.

The Speaker resumed the chair.

THE SPEAKER: In that case Dr. Smith will be seated.

If there are no objections, the report of the Credentials Committee will be considered the roll call of the afternoon meeting.

The next order of business is unfinished business. Is there any unfinished business to come before the House of Delegates at this time?

W. R. YOUNG, M.D. (Van Buren): Are resolutions in order?

THE SPEAKER: If you wish to revert to the previous order of business of offering resolutions, I will entertain your resolution. It can be considered as unfinished business.

### V-2. RE: SPECIAL MEMBERSHIPS

W. R. YOUNG, M.D.:

WHEREAS, Wilbur Hoyt, M.D., of Paw Paw, Michigan, has fulfilled the requirements for Membership Emeritus,

BE IT RESOLVED, that this House of Delegates accord him Membership Emeritus in the Michigan State Medical Society.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions. Is there any other unfinished business?

### VI-14. BY-LAWS, CHAPTER 4, SECTION 4, RE: DUTIES OF SECRETARY

BE IT RESOLVED, that the second sentence of Chapter 4, Section 4 of the By-Laws be deleted, which reads as follows:

"He shall be an ex-officio member of the executive committee of The Council without a vote."

THE SPEAKER: This resolution will be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

### VI-15. BY-LAWS, CHAPTER 10, SECTION 1, RE: CHANGE OF WORD "SESSION" TO "MEETING"; ALSO "PRESENT" TO "SEATED"

BE IT RESOLVED, that Chapter 10, Section 1, of the By-Laws, first sentence be amended to read as follows:

"These By-Laws may be amended by a majority vote of the delegates *seated*, after the proposed amendment is laid on the table for one *meeting*."

THE SPEAKER: This resolution will also be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

### VI-16. UNFINISHED BUSINESS FROM 1940 HOUSE OF DELEGATES

THE SPEAKER: We will also refer to the Reference Committee on Amendments to the Constitution and Bylaws the proposed amendments to the Constitution and By-Laws from the 1940 House of Delegates.

## IX. Reports of Reference Committees

### IX-1. ON OFFICERS REPORTS (I, II, IV, AND V-9)

H. F. DIBBLE, M.D., moved the acceptance of this report.

"We recommend the acceptance of all the officers' reports and concur in all of their recommendations, especially the fund for carrying on the postgraduate course made by the president.

The motion was regularly seconded, put to a vote and carried.

THE SPEAKER: The next item is the report of the Reference Committee on Reports of The Council, Dr. Spalding.

### IX-2. ON COUNCIL REPORTS (III, AND V-3a to V-3g INCLUSIVE)

E. D. SPALDING, M.D.: Mr. Speaker, your committee met and reviewed the published report of The Council, with their appended recommendations as to action by this body, and also the supplementary report with two additional recommendations. The report speaks for itself as to the enormous amount of work that has been done by these men and certainly merits the whole-hearted endorsement of all of us. The de-

tails of this can be found in the Handbook and need not be gone into at this time, but I will take up specifically the recommendations at the end of the report, serially.

"With respect to the five original and two supplemental Recommendations of The Council:

"1. Your committee suggests that the Secretary of the Michigan State Medical Society send out letters of appreciation to appropriate members of the Michigan Legislature, and in addition a similar letter to the Governor, for their courteous reception of members of the medical profession and thoughtful consideration of medical and public health matters throughout the year."

E. D. Spalding, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

"2. We approve the State Society's joining in the development of a plan of rehabilitation or rejected draftees wherein the physician-patient relationship is safeguarded, and suggest the appointment of a special committee to study this problem, with power to act."

E. D. Spalding, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

"3. We suggest letters be sent urging the immediate study and revision of welfare benefit schedules in those counties where medical service is being rendered below cost."

E. D. Spalding, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

"4. We approve the receiving and endorsing of the resolutions from all the state's fifty-five county medical societies recommending renewal of the Charter of the Michigan State Medical Society, and propose that appropriate action be taken by the Secretary to effect this."

E. D. Spalding, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

"5. This Committee adds its endorsement to the proposals of the Special Committee appointed to clarify the election of delegates and alternates to the American Medical Association."

E. D. Spalding, M.D.: That recommendation is before you in the form of another resolution but it also appears in The Council's report. I move the adoption of this recommendation of The Council.

The motion was regularly seconded, put to a vote and carried.

E. D. Spalding, M.D.: Now to the two supplemental recommendations of The Council given to you this morning by them.

"6. We approve of aggressive action being taken by county medical societies where needed, to secure the compliance of County Social Welfare Boards with the Michigan Welfare Law of 1939, before they draw up their annual budgets."

E. D. Spalding, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

"7. We endorse the House of Delegates' reaffirmation of the authorization to The Council to levy assessments to a total of $5.00 when needed."

E. D. Spalding, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

E. D. Spalding, M.D.: Mr. Chairman, I now move the adoption of the report of The Council as a whole, including its original recommendations and two supplementary recommendations.

The motion was regularly seconded, put to a vote and carried.

E. D. Spalding, M.D.: In addition to the report of The Council, with its recommendations, there were a group of resolutions presented to this reference committee from various county societies. I will take them up in groups, depending on their context.

E. D. Spalding, M.D., read the report on resolutions submitted by St. Clair and Genesee County Medical Societies re request for dissolution of Michigan Medical Service (see pages 20 and 22) and moved that said resolutions be not adopted.

The motion was regularly seconded.

The Speaker: It has been moved and supported that these two resolutions by St. Clair and Genesee Counties, to the effect that Michigan Medical Service be discontinued, be not adopted. Is there any debate?

Donald R. Brasie, M.D.: Mr. Speaker, the reason Genesee introduced this resolution was to express their dissatisfaction with the way Medical Service is now run. I think I can honestly admit that they expected this action on your part. However, for a great variety of reasons that I don't think it is necessary to go into again, you have heard them—

E. D. Spalding, M.D.: Mr. Chairman, I rise to a point of order. The motion before the house is that the recommendation to discontinue Michigan Medical Service be not adopted. We are not now concerned with how it shall be conducted, if it is to be continued.

The question was called for.

Donald R. Brasie, M.D.: O.K. May I proceed to discuss that point?

The Speaker: You may proceed to discuss that point, yes, in a reasonable length of time.

Donald R. Braisie, M.D.: Thank you. If the Michigan Medical Service is to continue on the basis of paying inadequate fees, at least in our county, on patients from whom we have been receiving an adequate fee, in good times like these, we cannot see why we should substitute Michigan Medical Service for an insurance form that at the present time is entirely satisfactory to the members of our county society.

We were told by officials, officers and others, who spoke to us, that, if we did not desire Michigan Medical Service in our county, we did not have to have it.

E. D. Spalding, M.D.: Mr. Chairman, I regret interrupting the speaker, as another point of order, I suggest that, in view of the context of the discussion, we go into executive session.

The Speaker: Is there a support?

The motion was regularly seconded.

## Executive Session

The Speaker: Without calling for a vote, the Speaker will then declare the House to be in executive session.

The House went into Executive Session, and subsequently adopted the Report of the Reference Committee, re The Council Reports and also the St. Clair County Medical Society Resolution (Callery) and the Genesee County Medical Society Resolution (Brasie No. 1) concerning dissolution of Michigan Medical Service.

The House, as a whole, considered the Genesee County Medical Society Resolution (Brasie No. 2) concerning income limits of Michigan Medical Service, and referred this Resolution to the membership of Michigan Medical Service.

The House, as a whole, considered the Genesee County Medical Society Resolution (Brasie No. 3) concerning limitation of presentation of Michigan Medical Service in certain counties, and adopted a motion that this Resolution be tabled.

The House, as a whole, considered the Genesee County Medical Society Resolution (Brasie No. 4) concerning supervision of Michigan Medical Service in individual counties, and adopted a motion that this Resolution be tabled.

The House, as a whole, considered the Insley Resolution concerning a study by Michigan Medical Service of a limited liability certificate, amended the Resolution, and adopted it as follows:

Whereas, Michigan Medical Service is a movement of national significance and of great sociological value, and

WHEREAS, Michigan Medical Service was expected to go through a period of stress and strain, and

WHEREAS, It now appears that new and different approaches may be used to make the service plan even more workable,

THEREFORE, BE IT RESOLVED, That the House of Delegates of the Michigan State Medical Society, representing the physicians of Michigan, recommend that Michigan Medical Service study (for comparative purposes) such new approaches as might be generally described as "limited liability" service contracts and place same into operation if and when deemed advisable.

The House, as a whole, considered the Ekelund Resolution concerning personnel of Michigan Medical Service, and adopted it.

Thereafter, the House of Delegates arose from Executive Session.

THE SPEAKER: We are now out of executive session.

*(End of Executive Session)*

We will now consider the report of the Reference Committee on Reports of Standing Committees, Dr. Myers.

## IX-3. ON REPORTS OF STANDING COMMITTEES

### IX-3. LEGISLATIVE COMMITTEE (VII-1)

DEAN W. MYERS, M.D.: Mr. Speaker, report of the Reference Committee on Reports of Standing Committees. On the Legislative Committee's report, your Committee on Reports of Standing Committees approves the report of the Legislative Committee as published in the Handbook.

I move the adoption of this resolution.

The motion was regularly seconded, put to a vote and carried.

### IX-3. DISTRIBUTION OF MEDICAL CARE (VII-2)

DEAN W. MYERS, M.D.: Your Committee on Reports of Standing Committees approves the reports of the following committees, as published in the Handbook for Delegates: First, Committee on Distribution of Medical Care. I move the adoption of their report.

The motion was regularly seconded, put to a vote and carried.

### IX-3. MEDICAL-LEGAL COMMITTEE (VII-3)

DEAN W. MYERS, M.D.: The report of the Medical-Legal Committee. I move the adoption of their report.

The motion was regularly seconded, put to a vote and carried.

THE SPEAKER: Gentlemen, without objection, Dr. Myers will submit the Reference Reports on the Preventive Committee and its sub-committees, and several other committees, and adopt the reports in toto.

Dean W. Myers, M.D. read the list of committees, beginning with Joint Committee on Health Education and ending with Committee on Ethics.

### IX-3. JOINT COMMITTEE ON HEALTH EDUCATION (VII-4)

### IX-3. PREVENTIVE MEDICINE COMMITTEE (VII-5)

### IX-3. CANCER COMMITTEE (VII-6)

### IX-3. MATERNAL HEALTH COMMITTEE (VII-7)

### IX-3. SYPHILIS CONTROL COMMITTEE (VII-8)

### IX-3. TUBERCULOSIS CONTROL COMMITTEE (VII-9)

### IX-3. INDUSTRIAL HEALTH COMMITTEE (VII-10)

### IX-3. MENTAL HYGIENE COMMITTEE (VII-11)

### IX-3. CHILD WELFARE COMMITTEE (VII-12)

### IX-3. IODIZED SALT COMMITTEE (VII-13)

### IX-3. HEART AND DEGENERATIVE DISEASES COMMITTEE (VII-14)

### IX-3. POSTGRADUATE MEDICAL EDUCATION COMMITTEE (VII-15)

### IX-3. ETHICS COMMITTEE (VII-16)

### IX-3. PUBLIC RELATIONS COMMITTEE (VII-17)

DEAN W. MYERS, M.D.: I move the adoption of the reports from these several committees.

The motion was regularly seconded, put to a vote and carried.

### IX-3. RE: PREMARITAL INSTRUCTION (V-8)

DEAN W. MYERS, M.D.: On the next report, the resolution as offered by Dr. DeVries, your committee was not quite sure why that resolution was referred to this committee, but we acted upon it anyhow, as follows:

"Resolution on The Family offered by Dr. DeVries: Your Committee on Reports of Standing Committees approves the Resolution, except the last paragraph referring to fees charged for such information and recommends that that paragraph be deleted. We also recommend that the Resolution be referred back to the House of Delegates to be considered further by the Standing Committee on Preventive Medicine."

DEAN W. MYERS, M.D.: I move the adoption of this report, Mr. Speaker.

The motion was regularly seconded, put to a vote and carried.

"Your Committee further recommends that the House of Delegates extend to the committees and their individual members its appreciation for the excellent work done during the year and advise that all members carefully study the reports as published in the Handbook, to the end that the Society's membership shall be better informed on the work done and ends accomplished and consequently be better prepared to render effective assistance in carrying forward the aims and objects of the Michigan State Medical Society."

DEAN W. MYERS, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

DEAN W. MYERS, M.D.: Mr. Speaker, I move the adoption of the entire report.

The motion was regularly seconded, put to a vote and carried.

THE SPEAKER: Our next order of business will be the report of the Reference Committee on Reports of Special Committees.

## IX-5. ON REPORTS OF SPECIAL COMMITTEES

GEO. H. SOUTHWICK, M.D.: Mr. Speaker, Members of the House of Delegates: The Reference Committee on Reports of Special Committees wish to make the following report.

### IX-5. RE: COMMITTEE ON NURSES TRAINING SCHOOLS (VIII-1)

"We recommend that the Committee report be accepted and concurred in, but that the committee be instructed to find some solution for the present shortage of nursing help during this emergency. It is suggested that the committee approach the Legislative Committee of the State Society and through them contact the Governor with the view in mind of bringing more drastically to the State Board of Registration for Nurses the marked harm being done by the present shortage, as well as their lack of any definite policy for its immediate alleviation."

GEO. H. SOUTHWICK, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

### IX-5. PRELICENSURE MEDICAL EDUCATION COMMITTEE (VIII-3)

GEO. H. SOUTHWICK, M.D.: Report of Representatives to the Conference Committee on Prelicensure Med-

ical Education. As you know, this committee is the collaborating committee between the University of Michigan, Wayne University, and representatives of the hospital association, and it was their intent and effort to try to develop some agreeable plan for fifth year education in the unaffiliated hospitals, by that I mean unaffiliated with teaching institutions;

"We recommend that this report be accepted, and that the studies of this difficult problem be continued."

Geo. H. Southwick, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

## IX-5. RADIO COMMITTEE (VIII-4)

Report of Radio Committee: We approve the report of the Radio Committee, and suggest that this type of work be continued. We wish to thank the members of this committee as well as the speakers for their services to the profession and to the public.

Geo. H. Southwick, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

## IX-5. ADVISORY COMMITTEE TO WOMAN'S AUXILIARY (VIII-5)

"We recommend that this report be accepted and that the future committee coöperate with the Auxiliary in the excellent work they are doing."

Geo. H. Southwick, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

## IX-5. SCIENTIFIC WORK COMMITTEE (VIII-6)

"The Reference Committee on Special Committees takes cognizance of the Scientific Work Committee as reflected in the program.

"The excellent array of talent should be greatly appreciated by every member attending the general meetings, as well as the Section Meetings on Friday.

"The eleven Discussion Conferences arranged for should be extremely helpful. Cognizance should also be taken of the blank slips in the Program upon which questions to guest essayists may be written.

"Your Committee particularly commends the reëstablishment of scientific exhibits and believes this to be one of the most instructive features of the program."

Geo. H. Southwick, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

## IX-5. MEDICAL PREPAREDNESS COMMITTEE (VIII-2)

"We reviewed the report of the Committee on Medical Preparedness and appreciate the amount of work in preparing and clarifying the questionnaires.

"In view of the knowledge this Committee has obtained, we recommend that this Committee be continued for the duration of the present emergency."

Geo. H. Southwick, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

Geo. H. Southwick, M.D.: I move the adoption of the report of the Reference Committee as a whole.

The motion was regularly seconded, put to a vote and carried.

## IX-6. ON AMENDMENT TO CONSTITUTION AND BY-LAWS

## IX-6(a). UNFINISHED BUSINESS, FROM 1940 (VI-16)

The Speaker: The next order of business will be the report of the Reference Committee on Amendments to the Constitution and By-Laws, with the unfinished business from the 1940 House of Delegates.

E. W. Foss, M.D.: Mr. Speaker and Members of the House of Delegates: I had the biggest shock of by life. At our committee meeting this noon I found the Speaker had made a mistake in putting me in as Chairman. I found a member of our committee who had been sleeping, eating and digesting the Constitution and By-Laws for the last three months. So I am asking him to take over my job. Dr. Hess.

C. L. Hess, M.D. (Bay-Arenac-Iosco): At Dr. Foss' request, I have agreed to make the report of the Reference Committee on Amendments to the Constitution and By-Laws.

The first has to do with the report on page 19 of the Handbook concerning those resolutions that were presented last year and come up this year for amendment to the Constitution.

## IX-6(a). PROPOSED CONSTITUTIONAL AMENDMENT, ARTICLE IV, SECTION 3, REJECTED

Article IV, Section 3.

The officers of this Society and the members of The Council shall be ex officio members of the House of Delegates, and, with the exception of the Speaker of the House of Delegates, shall be without power to vote in the House of Delegates.

1. Amend Article IV, Section 3 to read as follows:

"The officers of this Society, Past Presidents, and Members of the Council shall be ex officio members of the House of Delegates without power to vote."

C. L. Hess, M.D.: You will notice that the power of the Speaker of the House to vote has been left out. For that reason the committee is unanimous in not recommending this resolution. There has been another resolution presented concerning the Past Presidents, which will take care of that particular phase. So that the committee does not recommend the adoption of this resolution. I make that motion, Mr. Speaker.

The motion was regularly seconded.

The question was called for, put to a vote and carried.

## IX-6(a). PROPOSED CONSTITUTIONAL AMENDMENT, ARTICLE IX, SECTION 4, REJECTED

Article IX, Section 4.

The Secretary shall collect all annual dues and all monies owing to the Society, depositing them in an approved depository and disbursed by him upon order of the Council. The Council shall cause an annual audit to be made of the funds of the Society by certified public accountants, and require the Treasurer and the Secretary to be bonded for an adequate amount.

2. Amend Constitution, Article IX, Section 4, to read as follows:

"The Secretary shall collect all annual dues and all monies owing to the Society, depositing them in an approved depository and disbursed by him upon order of the Council, or invested by him in United States Government bonds with approval of the Council."

C. L. Hess, M.D.: You will notice here, again, that no provision is made for the annual audit. For that reason, the committee recommends that this proposed amendment not be approved. I make that motion, Mr. Speaker.

The motion was regularly seconded, put to a vote and carried.

## IX-6(a). PROPOSED CONSTITUTIONAL AMENDMENT, ARTICLE XII, SECTION 1, ADOPTED

Article XII, Section 1.

The House of Delegates may amend any article of this constitution by a two-thirds vote of the Delegates present at any annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been published at least once during the year in the Journal of the Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken.

3. Amend Article XII, Section 1 to read as follows:

"The House of Delegates may amend any article of this con-

stitution by a two-thirds vote of the Delegates seated at any annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been published at least once during the year in the JOURNAL of the *Society*, or sent officially to each component society at least two months before the meeting at which final action is to be taken."

C. L. HESS, M.D.: The question comes up here as to the definition between "present" and "seated." You all recall the arguments that came up last year on that particular question.

The committee recommends the adoption of this resolution. I make that motion.

The motion was regularly seconded, put to a vote and carried.

## IX-6(a). PROPOSED CONSTITUTIONAL AMENDMENT, NEW ARTICLE XII, AND RENUMBERING OLD ARTICLE XII TO "ARTICLE XIII"—ADOPTED

C. L. Hess, M.D. read the new article to be known as Article XII.

4. Amend Constitution by adding a new article to be known as Article XII:

"Section 1.—A session shall mean all meetings at any one call.

"Section 2.—A meeting shall mean each separate convention at any one session."

C. L. HESS, M.D.: I think the meaning of that is clear to all. The committee recommends the adoption of this resolution. There is another point. Amend the Constitution by renumbering old Article XII to Article XIII, to make the numbering consecutive. The committee recommends the adoption of this amendment.

The motion was regularly seconded, put to a vote and carried.

## IX-6(a). PROPOSED BY-LAWS AMENDMENT, CHAPTER 10, SECTION 1, ADOPTED

C. L. HESS, M.D.: The next has to do with a By-Law that was presented at the last meeting.

T. K. GRUBER, M.D.: Mr. Speaker, I move that this By-Law be taken from the table. It was laid on the table last year.

The motion was regularly seconded, put to a vote and carried.

Chapter 10—Amendments

Section 1. These By-Laws may be amended by a majority vote of the delegates present, after the proposed amendment is laid on the table for one session. These By-Laws become effective immediately upon adoption.

6. Amend By-Laws, Chapter 10, Section 1, to read as follows:

"These By-Laws may be amended by a majority vote of the delegates present, after the proposed amendment is laid on the table for one meeting. These By-Laws become effective immediately upon adoption."

C. L. HESS, M.D., moved its adoption.

The motion was regularly seconded, put to a vote and carried.

C. L. HESS, M.D.: There are several proposed amendments to the Constitution which must lay over for one year.

THE SPEAKER: They go to the 1942 committee.

## IX-6(b). RE: BY-LAWS CHANGES PROPOSED BY 1941 HOUSE OF DELEGATES

## IX-6(b). PROPOSED BY-LAWS AMENDMENT, CHAPTER 3, SECTION 2 (VI-8)—ADOPTED

(See page 903)

C. L. Hess, M.D. moved its adoption.

The motion was regularly seconded, put to a vote and carried.

## IX-6(b). PROPOSED BY-LAWS AMENDMENT, CHAPTER 3, SECTION 7-d (VI-13)—ADOPTED

(See page 904)

C. L. Hess, M.D. moved its adoption.

The motion was regularly seconded, put to a vote and carried.

## IX-6(b). PROPOSED BY-LAWS AMENDMENT, CHAPTER 5, SECTION 1 (VI-10)—ADOPTED

(See page 904)

C. L. HESS, M.D.: The next refers to Chapter 5, Section 1 of the By-Laws, that has to do with the annual meeting, where the By-Laws conflicts with the Constitution. One sets the meeting for September and the other in January. This amendment recommends the deletion of the sentence specifying the annual meeting in the By-Laws, and leaves that specification in the Constitution still active.

C. L. Hess, M.D. moved its adoption.

The motion was regularly seconded, put to a vote and carried.

## IX-6(b). PROPOSED BY-LAWS AMENDMENT, CHAPTER 5, SECTION 1 (VI-12)—ADOPTED

(See page 904)

C. L. HESS, M.D.: Chapter 5, Section 1 of the By-Laws refers to elections in the Council. You heard President Urmston's discussion regarding this proposed change, and this covers his discussion.

C. L. HESS, M.D.: The argument is that, since this sentence of the proposed amendment provides for an Executive Committee, it is not necessary to have the fifth sentence, which specifies the formation of an executive body, since it would be a duplication.

Mr. Speaker, the committee recommends the adoption of this resolution.

The motion was regularly seconded, put to a vote and carried.

C. L. Hess, M.D. read the resolution proposing amendments contingent upon adoption of new Article XII.

C. L. HESS, M.D.: I wish to abbreviate this report. In these three By-Laws which are affected by this change in the Constitution, the committee recommends that this By-Law be held over for one more meeting, because other By-Laws have been presented at this particular meeting which will make a desirable correction. That has to do with the third By-Law:

"These By-Laws may be amended by a majority vote of the delegates present, after the proposed amendment is laid on the table for one meeting."

The question, again, of the word "seated" comes up. It seemed desirable to change the word "present" to "seated," which would require a majority of delegates. Amendments, as I say, have been presented by Dr. Foss this afternoon, which will take up this amendment and the additional amendment, to make these corrections.

The committee recommends that this resolution be laid over for one more meeting.

The motion was regularly seconded, put to a vote and carried.

C. L. HESS, M.D.: Mr. Speaker, I move the adoption of the report as a whole.

The motion was regularly seconded, put to a vote and carried.

THE SPEAKER: The next order of business will be the report of the Reference Committee on Resolutions, Dr. Cooksey.

## IX-4. REFERENCE COMMITTEE ON RESOLUTIONS RE: SPECIAL MEMBERSHIPS (V-2)

W. B. COOKSEY, M.D.: Mr. Speaker, Members of the House of Delegates: The Reference Committee on

Resolutions wish to recommend, after due study and clearing of all records, for Emeritus Membership, requested by the various county societies, the following:

For Emeritus Membership:

1. Charles D. Aaron, M.D., Detroit—Wayne County
2. Angus L. Cowan, M.D., Detroit—Wayne County
3. Gilbert S. Field, M.D., Detroit—Wayne County
4. George E. Frothingham, M.D., Detroit—Wayne County
5. Fred J. Graham, M.D., Alma—Gratiot-Isabella-Clare County
6. Abraham Leenhouts, M.D., Holland—Ottawa County
7. Wm. C. Martin, M.D., Detroit—Wayne County
8. Irwin H. Neff, M.D., Detroit—Wayne County
9. Walter R. Parker, M.D., Detroit—Wayne County
10. G. L. Renaud, M.D., Detroit—Wayne County
11. M. D. Ryan, M.D., Saginaw—Saginaw County
12. Joseph E. G. Waddington, M.D., Detroit—Wayne County

W. B. Cooksey, M.D.: We wish to recommend that these men be given Emeritus Membership.

The motion was regularly seconded, put to a vote and carried.

For Retired Membership:

1. Charles W. Ash, M.D., Bay City—Bay County
2. H. S. Bartholomew, M.D., Lansing—Ingham County
3. H. J. Hammond, M.D., Detroit—Wayne County
4. E. G. McConnell, M.D., Lansing—Ingham County
5. J. H. O'Dell, M.D., Three Rivers—St. Joseph County
6. C. H. O'Neil, M.D., Flint—Genesee County
7. C. V. Russell, M.D., Lansing—Ingham County
8. C. M. Swantek, M.D., Bay City—Bay County

W. B. Cooksey, M.D.: We recommend that they be given retired membership.

The motion was regularly seconded, put to a vote and carried.

## IX-4. RE: SECTION ON GENERAL PRACTICE (V-6)

W. B. Cooksey, M.D.: The following resolutions were presented for our consideration:

W. B. Cooksey, M.D., read the resolution introduced by Henry A. Luce, M.D., concerning a Section of General Practice (See page 905).

W. B. Cooksey, M.D.: We wish to call attention to the fact that if this resolution, which is proposed, to create a Section of General Practice, is adopted, it does not give, in the Michigan State Medical Society, any representation having to do with administration and jurisprudence of the Society. It only creates a scientific section, with a chairman and a secretary.

May I read Article 6, Section 4 of our Constitution and By-Laws, which states:

"New sections may be created or existing sections discontinued by the House of Delegates. The Scientilc Assembly and its component sections shall be conducted in accordance with the provisions of the Constitution and By-Laws."

After due consideration, your committee recommends that this resolution, creating a Section of General Practice, be approved, that we recommend a General Practice Section be given a trial period.

The motion was regularly seconded, put to a vote and carried.

## IX-4. RE: PROFESSIONAL LIAISON COMMITTEE (V-5)

W. B. Cooksey, M.D.: The second resolution concerns Dr. Allan McDonald's resolution which has to do with the creation of a committee of dentists, pharmacists and doctors, having to do with working toward common causes (See page 904).

The committee recommends that this resolution be adopted.

The motion was regularly seconded.

The Speaker: All in favor of this motion say "aye"; opposed the same. The motion is carried.

## IX-4. RE: ELECTION OF DELEGATES TO A.M.A. (V-4) (See page 904)

W. B. Cooksey, M.D.: This is to clarify and prevent an occurrence such as happened at the A.M.A. in Cleveland, in which there was quite a disturbance over an Oklahoma delegate. We recommend this be adopted.

The motion was regularly seconded, put to a vote and carried.

## IX-4. RE: NATIONAL PHYSICIANS COMMITTEE (V-7)

W. B. Cooksey, M.D. briefed the resolution approving program of National Physicians' Committee (See page 905).

W. B. Cooksey, M.D.: This is simply a matter of our Secretary writing a letter or letters, and there are no legal strings attached so that the A.M.A. or either of these two component societies will be liable.

Your committee, after due consideration, recommends this resolution be adopted.

The motion was regularly seconded, put to a vote and carried.

## IX-4. RE: APPRECIATION TO MICHIGAN LEGISLATURE AND GOVERNOR (V-1)

W. B. Cooksey, M.D.: The last resolution concerns expressing our appreciation to the members and officers of the Michigan Legislature and His Excellency the Governor. (See page 901.) We recommend that the resolution expressing appreciation to the Legislature and to His Excellency the Governor be adopted.

The motion was regularly seconded, put to a vote and carried.

W. B. Cooksey, M.D.: I move that the total recommendations of the committee be adopted.

The motion was regularly seconded, put to a vote and carried.

## VI-17. BY-LAWS AMENDMENT RE: SPECIAL MEMBERSHIP APPLICATIONS (PROPOSED CHANGE IN BY-LAWS, CHAPTER 7, SECTION 1)

L. J. Johnson, M.D.: After sitting through many sessions of this House, and hearing the presentations of resolutions for the transfer of active members to some of the other categories, such as Honorary Members and Retired Members, then being informed by our good Secretary that, although he had written letters several days and several weeks ago to the county secretaries, asking that these resolutions be sent in early, several of them arrived after this meeting convened, and considerable expense was incurred in getting in touch with the Lansing office and establishing the credits of these men, therefore, we are presenting this resolution to amend the By-Laws, to be known as Section 7 of Chapter 1. It is really an addition.

Whereas, before active members of the Michigan State Medical Society may be transferred to the Roster of either Honorary Members, or Retired Members, or Members Emeritus, proper investigation of their qualifications must be made for such transfer as provided in Article 3 of the Constitution, Sections 4, 6, and 7, then

Be it resolved, that the County societies send resolutions for such transfers to the Secretary of the State Society at least thirty days before the annual meeting of the Society.

Be it further resolved that the Secretary of the State Society present a resolution essentially combining these resolutions in a compact form to the House of Delegates at the regular annual meeting of the Society.

The Speaker: This resolution will be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

Gentlemen, this concludes our business for this afternoon.

The meeting recessed at six o'clock.

# Tuesday Evening Meeting

## September 16, 1941

The third meeting convened at eight-twenty o'clock, The Speaker, O. D. Stryker, M.D., presiding.

THE SPEAKER: The third meeting of the House of Delegates is now called to order.

We will have the supplementary report of the Committee on Credentials.

LUTHER W. DAY, M.D. (Hillsdale): Mr. Speaker, there are now seated in the House of Delegates 56 members. This constitutes a quorum, and there is no majority from any one particular county. Consequently, the House is legally constituted.

THE SPEAKER: If there is no objection from the House, the report of the Committee on Credentials will be considered the roll call.

The next order of business will be supplementary reports from reference committees.

Is there a supplementary report from the Reference Committee on Officers' Reports?

On Reports of the Council?

On Reports of Standing Committees?

On Reports of Special Committees?

### IX-6(b). ON AMENDMENTS TO CONSTITUTION AND BY-LAWS

### IX-6(b). PROPOSED BY-LAWS AMENDMENT, CHAPTER 10, SECTION 1 (VI-15) ADOPTED

E. O. Foss, M.D.: We have several amendments to consider. The first is Chapter 10, Section 1 of the By-Laws (See page 909).

We recommend the adoption of this resolution.

The motion was regularly seconded.

THE SEAPKER: Moved and seconded that this resolution be adopted as read. Are there any remarks? If not, all in favor say "aye"; opposed the same sign. The motion is carried.

### IX-6(b). PROPOSED BY-LAWS AMENDMENT, CHAPTER 4, SECTION 4 (VI-14)— ADOPTED (See page 909)

E. O. Foss, M.D.: The next one is Chapter 4, Section 4 of the By-laws.

We recommend the adoption of this resolution.

THE SPEAKER: Is there support?

The motion was regularly seconded.

THE SPEAKER: Moved and supported that this resolution be adopted as read. Are there any remarks?

C. L. HESS, M.D. (Bay-Arenac-Iosco): Mr. Speaker, regarding this particular sentence being deleted, as you recall this afternoon there was formed an executive committee composed of the chairmen of various committees of The Council and certain officers, which was passed. Now there is a conflict with that particular amendment regarding the Secretary under "Duties of the Officers," Section 4, Chapter 4, which says that the Secretary "shall be an ex officio member," and so forth, without a vote. By deleting this, the other amendment this afternoon takes care of the problem.

THE SPEAKER: All in favor of the motion say "aye"; opposed the same. The motion is carried.

### IX-6(b). PROPOSED BY-LAWS AMENDMENT, CHAPTER 3, SECTION 1 (VI-6)— ADOPTED (See page 903)

### IX-6(b). PROPOSED BY-LAWS AMENDMENT, CHAPTER 3, SECTION 7-L (VI-7)— ADOPTED (See page 903)

All we have done here is change the word "Sessions" to "Meetings."

I move the adoption of these two amendments.

The motion was regularly seconded.

THE SPEAKER: It has been moved and supported. All in favor say "aye"; opposed the same sign. The motion is carried.

### IX-6(b). PROPOSED BY-LAWS AMENDMENT, CHAPTER 1, NEW SECTION 7 (VI-1)— ADOPTED

E. O. Foss, M.D.: The proposed amendment to Chapter 1 is as follows: Amend Chapter 1 by adding a section to be known as Section 7. (See page 902.)

E. O. Foss, M.D.: I move the adoption of this resolution.

The motion was regularly seconded.

THE SPEAKER: It has been moved and supported. All in favor say "aye"; opposed the same. The motion is carried.

### IX-6(b). PROPOSED BY-LAWS AMENDMENT, CHAPTER 7, SECTION 1 (VI-17)— REFERRED TO 1942 SESSION

E. O. Foss, M.D., read the resolution concerning special membership applications (for honorary, retired, or members emeritus) (See Page 914).

E. O. Foss, M.D.: The committee is not prepared to act on this, and we recommend that this be held over until the next annual session. I so move.

The motion was regularly seconded.

THE SPEAKER: Moved and supported that this be held over to the next annual session. All in favor say "aye"; opposed the same. The motion is carried.

E. O. Foss, M.D.: I move the adoption of the Reference Committee Report as a whole.

The motion was regularly seconded.

THE SPEAKER: Moved and supported that the Reference Committee Report be adopted as a whole. All in favor say "aye"; opposed the same. The motion is carried.

# X. Elections

### X-1. COUNCILOR OF FIRST DISTRICT

Our next order of business will be elections. Our first election will be for Councilor of the First District, C. E. Umphrey, M.D., incumbent.

E. R. WITWER, M.D. (Wayne): During the past few years Wayne County has been very fortunate in having on The Council of the State Society a gentleman of distinction, refinement, culture and ambition, and it is the desire of the Wayne delegation that Clarence E. Umphrey, M.D., be continued as a member of The Council representing the First District of Wayne County, and it is my pleasure to place his name before this assembly for that distinguished office.

The motion was regularly seconded.

THE SPEAKER: Nomination has been moved and supported. Are there any further nominations?

T. K. GRUBER, M.D. (Wayne): I move that nominations be closed.

The motion was regularly seconded.

THE SPEAKER: Moved and supported that nominations be closed. All in favor say "aye"; opposed the same. The motion is carried.

### X-2. COUNCILOR OF FOURTH DISTRICT

Fourth District, R. J. Hubbell, M.D., Kalamazoo, incumbent.

I. W. BROWN, M.D. (Kalamazoo): R. J. Hubbell, M.D., of Kalamazoo, has served us during the last two years very efficiently, and I think the delegates from the other counties, as well as Kalamazoo, that comprise the Fourth Councilor District, join me in proposing the name of Dr. Hubbell to succeed himself for an-

other term as Councilor for our District, and I so nominate R. J. Hubbell, M.D., of Kalamazoo.

THE SPEAKER: Are there any further nominations?

C. L. HESS, M.D. (Bay-Arenac-Iosco): I move that nominations be closed.

The motion was regularly seconded.

THE SPEAKER: All in favor say "aye"; opposed the same.

All in favor of the election of Dr. Hubbell say "aye"; opposed the same. Dr. Hubbell is elected.

## X-3. COUNCILOR OF FIFTH DISTRICT

Next will be the Fifth District, Vernor M. Moore, M.D., Grand Rapids, incumbent.

CARL F. SNAPP, M.D. (Kent): Members of the House of Delegates: The Fifth District has been exceedingly fortunate for several years in having on The Council a tireless worker. He has been a valued member of The Council for several years now, a member of the Executive Committee where he has been chairman of the Finance Committee, and as such has been termed by several as the watchdog of the treasury of our Society. He has been vitally interested in every phase of organized medicine. He has had every practitioner in his District very much at heart in all he has done.

I take great pleasure in renominating Vernor M. Moore, M.D. as Councilor of the Fifth District to succeed himself.

The motion was regularly seconded.

THE SPEAKER: Dr. Moore has been nominated and supported. Any further nominations?

A. E. STICKLEY, M.D. (Ottawa): I move that nominations be closed.

The motion was regularly seconded.

THE SPEAKER: Moved and supported that nominations be closed. All in favor of Dr. Moore as Councilor of the Fifth District say "aye"; opposed the same. Dr. Moore is elected.

## X-4. COUNCILOR OF SIXTH DISTRICT

Next will come the Sixth District, Ray S. Morrish, M.D., of Flint, incumbent.

I. W. GREENE, M.D. (Shiawassee): It is incumbent upon me to dwell on the good Councilors we have had for our District in the past, but I will say we have been well represented within the last year and I would like to place in nomination the name of Ray Morrish, M.D.

THE SPEAKER: Dr. Morrish has been nominated. Any further nominations?

The nomination was regularly seconded.

THE SPEAKER: And seconded. If there are no further nominations, all in favor of Dr. Morrish will say "aye"; opposed the same. Dr. Morrish is elected.

## X-5. DELEGATES TO A.M.A.

Our next order of business is the election of a delegate to the American Medical Association, L. G. Christian, M.D., Lansing, incumbent.

T. I. BAUER, M.D. (Ingham): I should like to place again for nomination the name of L. G. Christian, M.D. We in Ingham County are very proud of the work he has done, both for us and for the State Medical Society, and also on the Welfare Commission and as delegate to the A.M.A. We believe he understands our problems and we would like to see him returned, so I am happy to nominate L. G. Christian, M.D.

The nomination was regularly seconded.

THE SPEAKER: The nomination of Dr. Christian has been moved and supported. Are there any further nominations? If not, all in favor of Dr. Christian say "aye"; opposed the same. Dr. Christian is elected.

We are now at the stage where the Speaker will select the name of a martyr who will resign, on promise of being reëlected, so as to straighten up this mess. Dr. Reeder is the sheep led to the slaughter. Dr. Reeder, you have the floor. It is your duty to resign, upon the promise of being reëlected.

FRANK E. REEDER, M.D. (Genesee): Mr. Speaker, being a young man in this House of Delegates and being the so-called baby or the junior delegate to the American Medical Association, I don't think this has been a game of chance here at all. I think it is right fitting and proper that I should resign. It requires a two-fisted guy to be Sergeant-at-Arms in the House of Delegates to the A.M.A., and last year when I polled the House with a ten-gallon hat and a .32 hanging down for a watch charm, Michigan really made them sit up and take notice.

However, I am very happy and it should be proper to favor my seniors. Therefore, Mr. Speaker, I resign as delegate to the A.M.A.

THE SPEAKER: Thank you.

There is a motion that the resignation of Dr. Reeder be accepted.

L. G. CHRISTIAN, M.D. (Ingham): I want to say it is with a great deal of regret that he had to resign and that he had to be reëlected.

FRANK E. REEDER, M.D. (Genesee): Mr. Speaker, I think if the delegates looked closely they saw no tears.

THE SPEAKER: All in favor of the resignation of Dr. Reeder say "aye"; opposed the same. His resignation is accepted.

A. E. CATHERWOOD, M.D. (Wayne): Now that we have gotten rid of Dr. Reeder, I think we should make it permanent, but I should like to nominate him again to succeed himself.

THE SPEAKER: Dr. Reeder has been nominated.

The nomination was regularly seconded.

THE SPEAKER: Are there any further nominations?

Motion was regularly made and seconded that nominations be closed.

THE SPEAKER: Moved and supported that nominations be closed. All in favor of Dr. Reeder say "aye"; opposed the same. Dr. Reeder is elected.

## X-6. ALTERNATE DELEGATES TO A.M.A.

Now we have the election of alternate delegates to the American Medical Association. There are two incumbents, George J. Curry, M.D., and Ralph H. Pino, M.D. Are there any nominations?

GEORGE J. CURRY, M.D. (Genesee): I should like to place in nomination the name of I. W. Greene, M.D., of Owosso, for alternate.

THE SPEAKER: Dr. Greene has been nominated as alternate delegate. Are there any further nominations?

S. W. INSLEY, M.D. (Wayne): I should like to place in nomination the name of a man who was incumbent before and who, I believe, richly deserves the honor—Ralph H. Pino, M.D.

THE SPEAKER: Are there further nominations?

C. S. RATIGAN, M.D. (Wayne): I move that nominations be closed.

C. L. HESS, M.D. (Bay-Arenac-Iosco): I second the motion.

THE SPEAKER: We will have to vote by ballot to determine seniority. Will the Tellers who served this afternoon again come forward?

L. J. HIRSCHMAN, M.D. (Wayne): Point of information. Didn't I understand from the revision of the Constitution and By-Laws that seniority was covered by the fact of whether a man has served before or not? If so, Dr. Pino has already served and is the senior.

C. L. HESS, M.D.: That is right.

THE SPEAKER: That answers your question.

C. S. RATIGAN, M.D.: Isn't that laid on the table until next year?

WILLIAM S. REVENO, M.D. (Wayne): Seniority is determined, according to the new resolution, first by

the length of time that the alternate delegate has served, and secondly by the number of votes polled in being elected. There are two factors that determine seniority. A man whose term has expired starts in again. The one holding office now assumes seniority, and the man who holds the highest number at this time takes his place in line.

THE SPEAKER: We will have an election.

R. L. NOVY, M.D. (Wayne): I should like to make a motion that in view of the seniority of Dr. Pino on previous occasions, election be dispensed with and that he be delegated as senior. I move to suspend the rules.

The motion was regularly seconded.

THE SPEAKER: Moved and supported that the rules be suspended and that, in view of the seniority of Dr. Pino, he be declared the senior alternate. All in favor say "aye"; opposed the same. The motion is carried.

## X-7. PRESIDENT-ELECT

The next order of business is the nomination of a President-Elect.

JOHN A. WESSINGER, M.D. (Washtenaw): Mr. Speaker and Members of the House of Delegates. I presume I am the youngest member in the House. I have sat with you continuously for twenty-five years. Rather reticent in spirit, I have had little to say, but tonight I beg the privilege of using not more than five minutes to give you my message.

The gentleman whom I have in mind I have known for many years. I have nothing but favorable impressions of him. My contacts have been numerous. I know and you know that he has done yeoman work for this organization for many years.

On two different occasions he has stood back when we urged him to come forward, and now we feel it is no longer his privilege to stand back. This gentleman has fine administrative abilities. He has a fine and splendid executive acumen, and nothing can afford me greater pleasure, and I feel it a high honor to be permitted to stand here before you gentlemen and place in nomination Howard H. Cummings, M.D., for President-Elect.

G. C. PENBERTHY, M.D. (Wayne): Mr. Speaker and Members of the House of Delegates: Howard Cummings and I were classmates. I have known Howard since 1906. As an officer of the State Society he has contributed materially to the welfare not only of the Society but of the people of Michigan, and it is my pleasure to second the nomination of Howard Cummings as President-Elect.

THE SPEAKER: Are there any further nominations?

E. R. WITWER, M.D. (Wayne): I move that nominations be closed.

The motion was regularly seconded.

THE SPEAKER: It is moved and supported that nominations be closed. All in favor say "aye"; opposed the same.

All in favor of Howard Cummings as President-Elect say "aye"; opposed the same. Dr. Cummings is unanimously elected. Will you come forward and take a bow?

The audience arose and applauded.

PRESIDENT-ELECT CUMMINGS: Mr. Speaker and Gentlemen: I feel deeply the honor you have bestowed upon me. I can think of many men in your organization who have served longer and better than I have, but I do feel this is a wonderful time for any doctor in the Michigan State Medical Society to render service, because for years doctors have been individualists. They have met their problems of life and death alone, and they have solved most of them alone.

In the last ten years, in this organization we have seen coöperation among doctors as never before, and every doctor belonging to this organization owes it to his fellow physicians to render some service for organized medicine, for the doctors of our state, and, most of all, for the people of our state.

Knowing that you men will coöperate with Henry Carstens this year, and with me as I come on the year following, it is going to be a pleasure to work with you. Thank you.

## X-8. COUNCILOR OF FOURTEENTH DISTRICT

THE SPEAKER: There now exists a vacancy of Councilor of the Fourteenth District to succeed Dr. Cummings. Nominations are now in order for Councilor for the Fourteenth District.

E. R. WITWER, M.D. (Wayne): I have watched the development of a lot of our younger men in Ann Arbor for quite some time.

THE SPEAKER: This nomination must be from a delegate of his Councilor District.

L. E. KNOLL, M.D. (Washtenaw): I am truly a baby in the House of Delegates. I will make my speech short. I will nominate one of my confreres from Ann Arbor, L. J. Johnson, M.D.

THE SPEAKER: L. J. Johnson, M.D., of Ann Arbor, has been nominated as Councilor for the Fourteenth District.

The nomination was regularly seconded.

THE SPEAKER: His nomination has been supported. Are there any further nominations?

JOHN A. WESSINGER, M.D. (Washtenaw): I move that nominations be closed.

The motion was regularly seconded.

THE SPEAKER: Moved and supported that nominations be closed. All in favor of Dr. Johnson will say "aye"; opposed the same. The motion is carried, and Dr. Johnson is unanimously elected.

## X-9. SPEAKER OF HOUSE OF DELEGATES

The next order of business is election of the Speaker of the House of Delegates.

T. K. GRUBER, M.D. (Wayne): Mr. Speaker, the position of Speaker of the House of Delegates, as well as member of The Council of the Michigan State Medical Society, entails a great deal of time and effort on the part of the Speaker, and entails a lot of time away from office.

Dr. O'Meara does not feel he would be in position to devote the time necessary to the position of Speaker of the House of Delegates, and, therefore, I wish to place in nomination the name of a man from Wayne County who is one of the up and coming young men of the Wayne County Medical Society. He has devoted a great deal of time and effort to the problems of organized medicine. He realizes it will take a great deal of his time and effort, and he is perfectly willing to make the effort to devote this time, and I am sure he will be a credit to the position.

I take pleasure in being asked by the Wayne delegation to place P. L. Ledwidge, M.D., in nomination for the position of Speaker of the House.

R. M. MCKEAN, M.D. (Wayne): It is my privilege and pleasure to support this young man Dr. Gruber has so eloquently nominated for this particular office.

THE SPEAKER: Are there any further nominations?

HENRY A. LUCE, M.D. (Wayne): When one internist supports another, I think it is time to close the nominations.

THE SPEAKER: Moved and supported that nominations be closed. All in favor of Dr. Ledwidge as Speaker of the House of Delegates say "aye"; opposed the same. Dr. Ledwidge is unanimously elected Speaker of the House of Delegates.

### X-10. VICE SPEAKER OF HOUSE OF DELEGATES

The next order of business will be the election of a Vice Speaker of the House of Delegates. Nominations are now in order.

L. J. Hirschman, M.D. (Wayne): Mr. Speaker, I am going to place the name of a man in nomination for Vice Speaker of the House, and the most surprised person in this assembly will be the man whose name I am going to present.

He is one of the younger men, as you will note, a man who has had a great deal of legislative experience, knows something about parliamentary law, and I believe would represent the general practitioner in the small community as well as in the legislature of our state.

I place in nomination the name of S. L. Loupee, M.D., of Dowagiac.

The Speaker: Dr. Loupee, of Dowagiac, has been nominated.

E. O. Foss, M.D. (Muskegon): I would like to place in nomination the name of George Southwick, M.D.

The Speaker: Dr. Southwick has been nominated. Are there any further nominations?

S. L. Loupee, M.D. (Cass): It certainly is a surprise to me to have somebody present my name here at this time in connection with an office in this group. I would appreciate the opportunity of doing what I possibly could do in the interests of this organization, because my heart and life are wrapped up in the progress of organized medicine, but I already have an obligation that takes me away from my work, that divides my attention, and that is a real obligation in so far as I am able to perform it. People down our way elected me as a member of the Michigan House of Representatives and in that position I have served two terms, and I doubt whether there are many men who know just what it means. There are many people who think it is just a fine opportunity to get away from home and have a good time, and don't realize what sacrifice one offers when he undertakes an obligation of that kind.

I have enjoyed my work in the Legislature, and I want to do what I can in the interests of organized medicine.

Thanking Dr. Hirschman for offering my name, I withdraw in favor of the other nominee.

L. O. Geib, M.D. (Wayne): I move that nominations be closed.

The motion was regularly seconded.

The Speaker: Moved and supported that nominations be closed. All in favor of Dr. Southwick say "aye"; opposed the same. Dr. Southwick is unanimously elected Vice Speaker.

That concludes our business for the day.

## XI. New Business

### XI-1. HONORARIUM TO RETIRING SPEAKER

Frank E. Reeder, M.D.: Mr. Speaker and Members of the House: Two years ago, when Philip Riley, M.D., retired as Speaker, and six years ago when I retired as Speaker, this House was very kind. The members voted a little honorarium to Dr. Riley and likewise to me.

I would like to offer a motion that this House of Delegates vote a sum not to exceed $25 to present an emblem of appreciation to our Speaker upon his retirement. I feel he is entitled to it, and I so move.

The motion was supported by several.

The Speaker: Dr. Ledwidge, will you take the chair, please?

P. L. Ledwidge, the Speaker-Elect, assumed the chair.

The Speaker-Elect: Gentlemen, I should like to say in the beginning that to be elected to this office is a high honor and a responsibility. I thank you sincerely for the honor, and I accept the responsibility.

There is a motion before the House, Dr. Reeder's motion that this body appropriate an amount for a proper emblem for our retiring Speaker. The motion has been supported by several. Is there any discussion?

All in favor say "aye"; opposed. The motion is carried. The Secretary will carry out this order, Mr. Speaker, and I want to congratulate you on the very nice work you have done for two years.

The Speaker, O. D. Stryker, M.D., resumed the chair.

The Speaker: I wish to thank you very much. It has indeed been a great pleasure—and I mean it—to serve as your presiding officer for two years. There are headaches, but there is pleasure, too, and it gives anyone a big inward glow to work with such a fine group of fellows when he becomes a member of The Council and the Executive Committee, and also Speaker of the House of Delegates. Thank you again.

### XI-2. PLACE AND DATE OF 1942 ANNUAL MEETING

The Speaker: There is but one more question, and that is the place and date of the 1942 annual meeting. In the last couple of years this has been left to The Council. It can be decided by either the House of Delegates or The Council.

We have two invitations, one from Grand Rapids and one from Detroit. Is it the pleasure of the House to accept one of these invitations, or to leave the matter up to The Council?

T. K. Gruber, M.D. (Wayne): Mr. Speaker, I move that the invitations for the place of meeting be turned over to The Council, and that they be requested to decide on the place and date of the 1942 Convention to the best advantage of the Society, the exhibitors, and all concerned.

Carl F. Snapp, M.D. (Kent): I support that motion.

The Speaker: Moved and supported that this matter be left to The Council and they decide which will be to the best advantage of all concerned. All in favor say "aye"; opposed the same. The motion is carried.

G. C. Penberthy, M.D. (Wayne): My attention has just been invited to the illness of Dr. Dempster, and I was given to understand he is about to be moved to a hospital. Dr. Dempster was our Editor for many years, a faithful servant to this Society, and I would move that the Secretary telegraph Dr. Dempster our sympathy, and try to build up the morale that is necessary. We all have known Dr. Dempster many years, and I think it only fitting that this House of Delegates, before adjourning, give some expression of their appreciation for the services rendered by Dr. Dempster.

The motion was regularly seconded and carried.

## XII. Adjournment

We are now adjourned.

The meeting adjourned at nine-fifteen o'clock.

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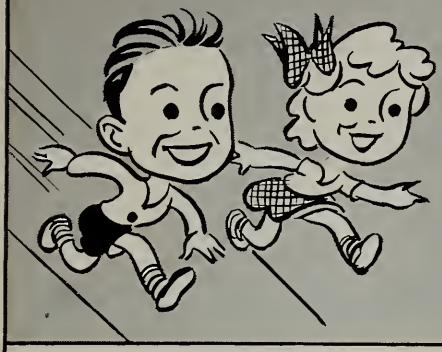
**THE 77TH ANNUAL MEETING, MSMS**

**SEPTEMBER 22, 23, 24, 25, 1942**

**GRAND RAPIDS**



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AND A healthy war cry, too . . . when children call for apples! Read what one well known dietitian says about the healthful qualities of apples:

**Dr. Thelma Porter,* in a Speech Before the Michigan State Horticultural Society Says:**

"Raw apples, when included in the daily meals of children and adults, provide stimulation and exercise to the gums and teeth, furnish some Vitamin C, supply alkaline mineral salts and provide the digestive tract with bland, non-irritating bulk.

"Apples, scraped, cooked or dried, have been a sovereign remedy for generations in the treatment of intestinal disorders, and at the present time are rather extensively used in therapeutic diets."

*Taken from the Sixty-Ninth Annual Report of the Secretary of the State Horticultural Society of Michigan for the year 1939.*

**Research Associate in Foods and Nutrition, Michigan State College, at present associated with Division of Health and Nutrition, F.S.A., Washington, D. C.*

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# YOU AND YOUR BUSINESS

## INSTALMENT CREDIT REGULATIONS NOT TO AFFECT LOANS FOR MEDICAL AND HOSPITAL EXPENSES

Loans for medical, hospital, dental or funeral expenses are exempt from the instalment credit regulations, if the obligor could not reasonably meet the requirements of the regulations.

The Federal Reserve Board, folowing out the executive order of President Roosevelt giving the Board authority to investigate, regulate and prohibit transfers of credit, adopted on August 21, 1941, Regulation "W" which is the first step in carrying out the purpose stated in the President's order. Regulation "W" fixes the maximum spread on time payments for various instalment purchases, at 18 months. This includes cash loans of less than $1,000 as well as specific list of 24 so-called consumers' durable goods. Minimum down payments which can be accepted for various goods are also prescribed by the regulations.

The Board has made possible the exemption of cases which occur because of loans for medical, hospital, dental or funeral expenses which cannot be reasonably taken care of according to Regulation "W." Of course, this ruling may be altered at any time as the Board sees fit.

MSMS

## NYA HEALTH EXAMINATIONS DISCONTINUED

B. W. Carey, M.D., recently announced that the NYA health examinations were discontinued in Michigan as of July 1, 1941, largely because of the limitation of the NYA appropriation. In order to keep the importance of health in the defense program of the NYA, the "screening process" is being used, whereby nurses in each area, who are under the immediate supervision of a doctor of medicine, will endeavor to pick up the marked deviations from normal health, and refer the youth to his private family physician for diagnosis and treatment. Doctor Carey states emphatically that the nurse will not diagnose any condition, but merely refer youths who because of obvious defects should have the attention of their physicians. Doctor Carey is hoping the original plan of health examinations of all NYA enrollees by doctors of medicine may be resumed before too long.

MSMS

## ONE EXAMINATION FOR DRAFTEES

A single physical examination for Selective Service registrants, in lieu of the present dual examinations conducted by local board physicians and Army induction stations, will be the procedure followed throughout the country by January 1, 1942, National Headquarters, Selective Service System, has announced.

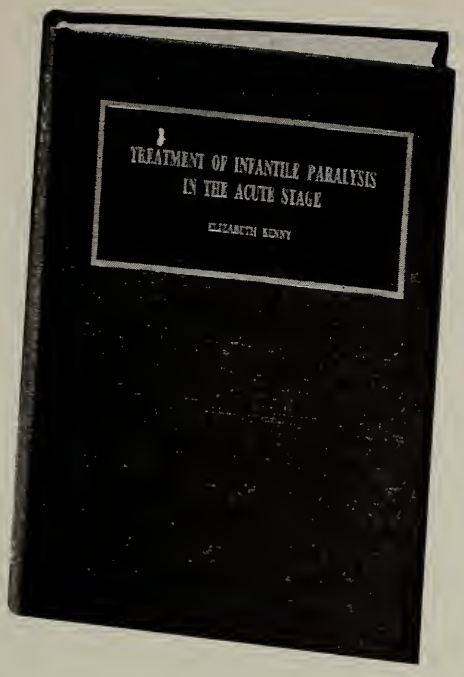
The plan for the single examination provides that each state be divided into districts, with the Army physicians conducting examinations of selectees in each of the districts. In the more congested areas an examination station will function at all times, while in the sparsely settled districts the tests will be given at periodic intervals.

MSMS

## REHABILITATION OF REJECTED DRAFTEES

"The President of the United States will announce today that the Selective Service System has been charged with the administration of a program for the rehabilitation of rejected men between the ages of twenty-one and twenty-eight found by the army to have remediable defects and who as a result of such treatment will be made available for general military service. The remedy will be provided by physicians and dentists of the locality in which the registrant resides and compensation will be paid from federal funds to be made available for such purpose. More detailed information concerning the plan will be sent at the earliest opportunity."

The above telegram from the Selective Service Headquarters in Washington, D. C., was received by the Michigan Director of Selective Service on October 10, 1941. At the date THE JOURNAL went to press, no additional information had been received in Michigan. When the details reach the Michigan State Medical Society headquarters, they will be relayed promptly

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Her revolutionary methods, first evolved in the Australian frontier and later demonstrated in Melbourne, challenged the attention of leading international poliomyelitis authorities who encouraged her to come to the United States to continue her work.

This book, containing her lectures, is the only text book on the subject of her methods. It reveals, for the first time, the history of the development of her treatment and its complete explanation written by Sister Kenny in person, the originator of this method. Completely illustrated and with full detail, it brings to the medical profession a highly informative and educational study.

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to the secretaries of the fifty-five component county medical societies.

The Medical Preparedness Committee of the American Medical Association attended a conference in Washington on Friday, October 17, relative to the matter of rehabilitation of rejected registrants. Reports on this meeting will be published in *The Journal of the American Medical Association.*

MSMS

## YOUR INCOME TAX

An authoritative article on the new Income Tax Law of 1941, as it applies to Doctors of Medicine, will be published in the December JOURNAL of the MSMS. The article will not only explain the provisions of the new law but also illustrate its workings by many concrete examples.

MSMS

## MEDICAL WELFARE IN MICHIGAN—RESULTS OF SURVEY

The following summary of questionnaires recently sent to the secretaries of county medical societies in Michigan would indicate a grave lack of uniformity in the handling of medical welfare in Michigan.

Fifty-five county medical societies reported, a return of 100 per cent.

In answer to the question: "Is your local fee schedule for medical care of indigents (including afflicted adults) higher or lower on the average than the present Fee Schedule of the Michigan Crippled Children Commission?":

One county medical society secretary reported that his county society has no schedule.

One secretary reported that the work is being done by salaried physicians (which is contrary to the Welfare Act of 1939).

Eleven secretaries stated that their local fee schedules were slightly higher.

Twenty-five secretaries reported that their local fee schedules were about the same as the M.C.C. schedule.

Seventeen secretaries reported that their local fee schedules were lower (these seventeen county medical societies represent 24 Michigan counties).

Of the seventeen county medical societies with lower schedules, twelve reported that they are giving study to plans whereby their members may be paid at least *cost price* for medical care of wards of government. Five reported their societies are doing nothing about the matter!

MSMS

## PRIVILEGED COMMUNICATION

A physician recently inquired: "Is there any liability to a physician who gives a copy of a positive serological examination to an insurance company?"

The best rule to apply is for a physician or a hospital always to request written authorization from a patient before furnishing an abstract of, excerpts from, or total history of any patient.

Inasmuch as the privileged communication statute is very flexible in regard to contagious and communicable diseases, it stands to reason that it also would be lenient in regard to reports of venereal disease in positive patients, especially if written authorization from the patient was obtained in advance.

Some statutes state that the privileged communication must be a wilful betrayal of the professional secret. A California appelate court has used the phrase "wilful betrayal," and it appears that a disclosure of a diagnosis would not be prohibited.

Of course, each case is an individual situation, and what is covered by insurance waivers to hospitals or doctors would not always hold good under certain other conditions; for example, a new Supreme Court decision in California holds that neither a hospital nor a radiologist may furnish films or a diagnosis on a patient without the permission *of the referring physician.* This is a new law, and the first time the referring physician has been designated as having control of the diagnosis.

As a rule, however, the patient's signing of a waiver (written authorization) is sufficient protection for the doctor of medicine and for the hospital.

MSMS

## MICHIGAN HOSPITALS AND MEDICAL PAYMENTS PLAN

In accident cases, large numbers of people are indemnified in whole or in part from insurance protection. But in countless numbers, the funds received by the patient are dissipated, and the

hospital and the doctor remain unpaid despite the fact that the settlement was predicated, often in its entirety, upon the medical expenses incurred. In other words, the insurance company paid the patient for the hospital and medical expense—but the patient went out and bought a new car instead of paying his just debt to the doctor and hospital.

To more definitely assure payments to physicians and to hospitals for their services, an agreement called the "Michigan Hospitals and Medical Payments Plan" has been entered into by the Michigan State Medical Society, the Michigan Hospital Association, the American Mutual Alliance, the Association of Casualty and Surety Executives, and a group of Michigan insurance carriers. This agreement has been in effect since March 1, 1941. During these seven months, the coöperation between the above-named groups has been so perfect and friendly that the Conference Committee, created under the Agreement to arbitrate differences, has not been called into any case.

The forms to be used in connection with Michigan Hospitals and Medical Payments Plan are available through the Executive Office, 2020 Olds Tower, Lansing. When you render service in an accident case, protect yourself financially under this agreement (explained in detail in the February, 1941, MSMS JOURNAL; free reprint available upon request).

MSMS

## "INVITE THEM TO JOIN"

"This Society shall consist of active members, junior members, honorary members, associate members, retired members and members emeritus," *M.S.M.S. Constitution, Article Three, Section One.*

The membership of the Michigan State Medical Society stands at 4,527. Approximately 350 eligible physicians in practice have not as yet joined a county or the State Society. A high percentage of these reputable practitioners would become associated with organized medicine as Active Members if they received a personal or telephonic invitation from a member of the Michigan State Medical Society. The matter of dues need not bother any physician, since the MSMS assessment for the last quarter of the year to *new* members is only $3.00. Invite them to join.

Another group that should be invited to join are the interns and residents who are now

**"He can still chew but He can't swaller"**

**It's an old Hoosier saying, often as true of the patient with superficial oral or pharyngeal pathology as of young gluttons. For the former, however, there is usually relief . . . NUPORALS, "Ciba."**

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Tangible benefits are being received by members of the Michigan State Medical Society—else what can account for the all-time high record of 4,527 members?

MSMS

## IS THE BUSINESS BOOM AFFECTING YOUR COLLECTIONS?

Almost every physician is busier now than he has been in years. The same is true of department stores and other agencies where both necessities and luxuries are being procured by men and women, many of whom have experienced long or short periods of unemployment.

While the doctor's services are now more readily sought, reports filter in that the patients' money again fails to reach the physician. The doctor continues to be the last to be paid.

Therefore, it is time for a little "examination of the business conscience" by every physician:

Are you sending statements promptly and regularly each month, to new and to old accounts alike?

Are you following systematically with letters and telephone calls if three plain statements elicit no response?

Have you recently checked your accounts receivable carefully for accounts that should be placed for collection?

Don't forget, Doctor, that "dead" accounts in your files are still very much alive so far as your payment of the Michigan Intangible Tax on these accounts receivable are concerned!

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# Woman's Auxiliary

## REPORT OF STATE CONVENTION

The 1941 state convention of the Woman's Auxiliary to the Michigan State Medical Society was held in Grand Rapids, September 16-19, at the Pantlind Hotel.

Mrs. Wm. J. Butler, Grand Rapids, President, Woman's Auxiliary, MSMS

Great credit is due to Mrs. T. C. Irwin and the Kent County group for an outstanding meeting. That much time and great effort had been put into the task was quite obvious. Also memorable were the charm and gracious dignity of our president, Mrs. R. V. Walker.

The business sessions were unusually well attended and very interesting. The highlight of the business meeting was Mrs. Walker's recommendation that a student loan fund, for the children of physicians, be established. The project met with universal approval and the motion on the matter was unanimously passed.

It was a great inspiration to the officers, the committee chairmen and the members to have our National President, Mrs. R. E. Mosiman, of Seattle, Washington, with us for a period of two days. The address that Mrs. Mosiman gave at our annual banquet will be of great help to us in our future plans. Health Education, Hygeia, and Nutrition in Home Defense were the topics that were stressed.

The county president's reports were read and the many projects that are being sponsored by the various counties were very interesting indeed. Many suggestions as to future projects were outlined, such as collecting unused office coats, nurses' uniforms and old medical instruments to be sent to Britain.

Mrs. Wm. J. Butler, incoming president, pointed out the necessity of helping with "National Defense," through the promotion of community health and nutrition in home defense. She also told us that plans were being made for a state-wide subscription campaign for the *Bulletin*.

Two hundred thirty-eight members registered. Of course, there were many more who attended the convention but failed to register. The outstanding feature of our annual banquet was a one-act play directed by Mrs. Fred C. Brace, a member of the Kent County Auxiliary. The actors were all physicians and members of the Kent County Medical Society. We greatly appreciate their kindness in doing this, and thank them for such a hilarious performance.

Again this year, we were honored by the presence of our beloved and charming Honorary President, Mrs. Guy L. Kiefer. A plaque is to be presented to Mrs. Kiefer for her devotion to the auxiliary over such a long period of years.

Respectfully submitted,

Francis Pyle (Mrs. Henry J.),
*Secretary*

### Woman's Auxiliary Officers

1941-1942

*President*—Mrs. Wm. J. Butler, Grand Rapids
*President-Elect*—Mrs. G. L. Willoughby, Flint
*Vice President*—Mrs. John J. Walch, Escanaba
*Secretary*—Mrs. Henry J. Pyle, Grand Rapids
*Treasurer*—Mrs. H. L. French, Lansing
*Past President*—Mrs. Roger V. Walker, Detroit
*Honorary President*—Mrs. Guy L. Kiefer, East Lansing

### Committee Chairmen

*Archives*—Mrs. L. G. Christian, Lansing
*Bulletin*—Mrs. John J. Walch, Escanaba
*Exhibits*—Mrs. Fred J. Melges, Battle Creek
*Finance*—Mrs. Elmer L. Whitney, Detroit
*Historian*—Mrs. J. Earl McIntyre, Lansing
*Hygeia*—Mrs. Sidney La Fever, Ann Arbor
*Legislation*—Mrs. Roger V. Walker, Detroit
*Organization*—Mrs. Oscar D. Stryker, Fremont
*Parliamentarian*—Mrs. A. V. Wenger, Grand Rapids
*Press*—Mrs. V. F. Kling, Ionia
*Program*—Mrs. Galen B. Ohmart, Detroit
*Public Relations*—Mrs. Mark Osterlin, Traverse City
*Revisions*—Mrs. C. L. Bennett, Kalamazoo
*Special Committee*—Mrs. Paul R. Urmston, Bay City


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# MICHIGAN'S DEPARTMENT OF HEALTH

HENRY A. MOYER, M.D., Commissioner, Lansing, Michigan

## DIPHTHERIA IN TWO SCHOOLS

Diphtheria was found in two rural schools in September, but in neither case did a local epidemic result. In a Lenawee county school, four boys and girls from a Mexican beet worker's family became ill and were isolated. Their ages were unusually high for attacks of diphtheria: 10, 14, 16 and 17 years old. Members of the family denied any visit to or from the migratory camp near Blissfield where diphtheria broke out among Mexican families in August.

The other school case of diphtheria occurred near St. Johns in Clinton county, but only a single case was reported.

## OBSTETRICS COURSE IN JANUARY

**Another two-week postgraduate course in obstetrics is offered for four physicians beginning January 5, 1942, at the University Hospital at Ann Arbor under the combined sponsorship of the University of Michigan Department of Postgraduate Medicine and the Michigan Department of Health. Applications should be sent now to Dr. Lillian R. Smith, director of the Bureau of Maternal and Child Health, Michigan Department of Health, Lansing. There is no fee for the course. Five physicians finished one of the courses October 4, 1941.**

## DEFENSE INDUSTRIES SPEND $350,000 FOR HEALTH

Michigan industries have spent more than $350,000 in the last fiscal year in carrying into effect suggestions for protecting defense workers from health hazards on the job.

**All defense contracts carry a requirement that the health of employes must be safeguarded during working hours, and during the 12 months ending June 30, the Bureau of Industrial Hygiene of the State Health Department made studies in more than 500 factories. At the time of the first return visits of bureau staff members, more than 80 per cent of the corrections asked for had been made.**

So many studies have been requested that they have been scheduled well into 1942. In response to a request for assistance, the United States Public Health Service has loaned the Department a sanitary engineer, a chemist and an industrial physician.

## SEPTEMBER INFANTILE PARALYSIS UNDER NORMAL

Infantile paralysis cases reported in September totaled 92, only a fifth as many as in September last year when the state had a record-breaking epidemic. The total of 92 compared also with a five-year average of 201. Fifty-six of the September cases were from Detroit.

August cases of polio totaled 59 compared with the five-year average of 103 and a total of 304 for August last year.

## PHYSICIANS CAN REGISTER BIRTHS OF YEARS AGO

Family physicians of the older generation often can give assistance where a birth certificate is not on file in official records. If a record is missing, the facts can be established in probate court, but the law also permits the physician who attended the birth to make out a certificate even though years may have passed. There is considerable opportunity for veteran physicians of the state to make out such delayed registrations because birth certificates are necessary for men and women working on defense jobs. Instructions from the Bureau of Records and Statistics are that the physician use a current birth blank in making out a delayed registration and that he file it with the local registrar in the usual way. No fee for such a late filing is required and the original record ultimately reaches the State Health Department vaults at Lansing.

## WHOOPING COUGH COMMUNICABLE DISEASE NO. 1

Since mid-summer, whooping cough has become the state's most prevalent communicable disease and is being reported at well over a thousand cases a month. From January through June, deaths totaled 50 compared with 19 in the first six months of 1940.

**Vaccine will be used more widely than ever this fall and winter to protect babies and young children against whooping cough. We are getting away from the old notions that whooping cough is an unavoidable childhood disease and that it is of little danger. Vaccine gives a high degree of protection against whooping cough and during the last year the State Health Department laboratories distributed to physicians enough vaccine for more than 30,000 children. It was the second year of our vaccine production and represents an increase of 44 per cent.**

Babies and very young children are most in need of protection, for two-thirds of the state's whooping cough deaths occur in babies less than a year old. Aside from its threat of death, whooping cough is one of the most troublesome of childhood diseases, for one case may keep a household upset for a month.

The recommendation of the State Health Department, the Michigan branch of the American Academy of Pediatrics and the Michigan State Medical Society is that physicians give whooping cough vaccine to babies at from six to nine months of age. The vaccine can also be given to children who are ready to enter school.

## HEALTH OF DEFENSE WORKERS

Since all defense contracts carry clauses for health protection of workers, there is special interest now in the work of the Bureau of Industrial Hygiene. In the first three months of 1940, 156 plans called for studies by the bureau, and of the recommended improvements 85 to 90 per cent had been completed by the first of May.

There is so much demand for studies by the bureau that in May there was work ahead for four months. The most common hazard to workers is dust, which is common in foundries and in factories wherever there are grinding operations. Consequently, most of the recommendations of the Department's industrial hygiene engineers are concerned with ventilation problems.

This bureau is headed by an industrial hygiene physician who has a staff of engineers and chemists. The federal law places responsibility upon the State Health Department for health conditions in defense factories. In Detroit, studies are made by the Bureau of Industrial Hygiene of the Detroit Department of Health. Outside Detroit, the State's studies are made from headquarters at Lansing and district offices at Saginaw, Pontiac and Grand Rapids.

# ✶ COUNTY AND PERSONAL ACTIVITIES ✶

*Loren W. Shaffer, M.D.,* Detroit, is co-author of the article entitled "Massive Dose Therapy in Early Syphilis" which appeared in THE JOURNAL of the AMA, issue of October 4, 1941.

* * *

*Mt. Carmel Mercy Hospital,* Detroit, broke ground on September 26 for a six-story 200-bed addition. The new wing will include also several operating rooms of various types, an enlarged laboratory and pharmacy facilities, and an auditorium with a seating capacity of 400 for staff and other types of meetings.

* * *

*The Detroit Diabetes Association* held its first meeting on October 8, 1941, at the Wayne County Medical Society Building, Detroit.

The Association is planning on meeting every second month or five meetings during the year. Interested physicians are invited to attend these meetings.

* * *

*R. Philip Sheets, M.D.,* Medical Superintendent of Traverse City State Hospital, announced recently the addition to his staff of Osee May Dill, M.D., and Paul Wilcox, M.D. Doctor Dill is a graduate of the Indiana University School and Doctor Wilcox graduated from the University of Michigan Medical School.

* * *

*The Mayo Foundation* announces that a series of lectures, demonstrations and clinics by members of the faculty and invited guests will be held in Rochester, Minn., during the week of November 10. Problems related to medical and surgical emergencies encountered in civilian and military practice will be emphasized. Physicians are invited to attend.

* * *

*Federal Food, Drug and Cosmetic* regulations require the label "warning, may be habit forming" on a specific list of drugs used in prescriptions. Unless the prescription is marked "not to be refilled," pharmacists must place the warning label on the prescription. There are also instances in which a prescription may not be refilled without verbal or written consent of the physician.

* * *

*Opening for physician* at Ionia State Hospital. Salary $300 per month, less maintenance for physician and his family if married. Six room cottage available for married physician or suitable quarters for a single man. Excellent opportunity to gain valuable experience in neuropsychiatry, as well as in other branches of medicine. Write P. C. Robertson, M.D., Medical Superintendent, Ionia State Hospital, Ionia, Michigan.

* * *

*Plans for the 1942 MSMS Convention* are already being developed. The Scientific Program for the 77th Annual Meeting will feature approximately 75 eminent lecturers. The exhibit will again be held in the Civic Auditorium of Grand Rapids. The headquarters will be at the Pantlind Hotel. The dates: September 22, 23, 24, 25, 1942.


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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

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*"Shock* is one of the most overworked terms in the medico-legal vocabulary, as many deaths said to be due to shock should really be ascribed to such conditions as loss of blood, exhaustion, injury to a vital organ, concussion of the brain, and so forth. Cases in which persons can justly be said to owe their death to shock are comparatively rare."—Sir Bernard Spilsbury, "Some Medico-Legal Aspects of Shock," *Medico-Legal and Criminological Review 1,* January, 1934.

* * *

*The U. S. Director of Civilian Defense* has appointed the following Medical Advisory Board to assist the Medical Division of the Office of Civilian Defense: George Baehr, M.D., New York, Chairman; Robin C. Buerki, M.D., Madison, Wisconsin; Elliott Cutler, M.D., Boston, Massachusetts; Oliver Kiel, M.D., Wichita Falls, Texas; Albert McCown, M.D., Washington, D. C.; and Fred Rankin, M.D., Lexington, Kentucky.

The MSMS representative to the Michigan Civil Defense Advisory Board is P. R. Urmston, M.D., Bay City.

* * *

*Many physicians,* as well as other prominent professional men in Michigan, have recently been circularized by the "Blue Book and Social Register of America" in an effort to obtain permission to publish their names in the so-called register. Inquiries have been directed to the "Blue Book and Social Register of America" at its Detroit office in order to obtain more complete information concerning the project, but the company has not given the courtesy of a reply, even to the Detroit Better Business Bureau!

"Before you invest, investigate."

* * *

*Hospital Bed Facilities.*—According to a widespread survey made of hospital bed facilities in the United States, released today by the Census Bureau of the Department of Commerce, 1,282,785 beds were available in 9,614 institutions for the medical care of the American people in 1939. The country's 6,991 hospitals and sanatoriums provided the great bulk of this care—355,145,063 patient-days, or the equivalent of one week-end stay in the hospital each year for every person in the United States. Infirmaries and nursing, convalescent, and rest homes provided the remainder.

Hospitals and sanatoriums had 1,186,262 beds or 92 per cent of the nation's total. Census Bureau figures show that the average hospital had 169 beds and served 5,000 families.

* * *

*Surgeon General Thomas Parran* of the United States Public Health Service recently called for 50,000 well educated young women to begin training now for professional nursing careers in order to "avert serious damage to the Nation's health during the present emergency."

The Surgeon General declared that this large number of students is needed to meet the tremendous demand for graduate registered nurses as a result of the national defense program.

The States Relations Division of the United States Public Health Service is administering a recent Congressional appropriation of $1,250,000 which will facilitate the training of these additional nurses.

* * *

*Committees of The Council.*—A. S. Brunk, M.D., Chairman of The Council, announces the following committees of The Council for 1941-42:

*Finance Committee*—Vernor M. Moore, M.D., Grand Rapids, Chairman; W. E. Barstow, M.D., St. Louis; L. J. Johnson, M.D., Ann Arbor; P. L. Ledwidge, M.D., Detroit and R. S. Morrish, M.D., Flint. *Publication Committee*—Wilfrid Haughey, M.D., Battle Creek, Chairman; Otto O. Beck, M.D., Birmingham; T. E. DeGurse, M.D., Marine City; Roy C. Perkins, M.D.,

Bay City; and Clarence E. Umphrey, M.D., Detroit. *County Societies Committee*—E. F. Sladek, M.D., Traverse City, Chairman; R. J. Hubbell, M.D., Kalamazoo; W. H. Huron, M.D., Iron Mountain; A. H. Miller, M.D., Gladstone; and Philip A. Riley, M.D., Jackson.

* * *

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**Bilhuber-Knoll Corporation, Orange, New Jersey**
**Ernst Bischoff Company, Ivoryton, Connecticut**
**The Borden Company, New York, New York**
**Burroughs Wellcome & Company, New York, New York**

The above ten firms were exhibitors at the 1941 Convention of the Michigan State Medical Society and helped make possible for your enjoyment one of the outstanding state medical meetings in the country. Remember *your friends* when you have need of equipment, medical supplies, appliances or service.

* * *

*The U. S. Civil Service Commission* has made the following principal changes in its announcement for new medical officers: the adding of the option "Public health, general" to the Senior grade and the option "Cancer: (a) Research, (b) Diagnosis and Treatment" to the Medical Officer and Associate grade; the provision for the acceptance of aplications for the Associate grade from persons who have not yet completed internship; the setting back of the date of graduation for the Associate grade to May 1, 1930; and the raising of the age limit for *all* grades to *fifty-three*. Further information may be obtained from the Commission's representative at any first- or second-class post office or from the Central Office at Washington, D. C.

*Appointments in the Medical Corps, United States Naval Reserve.*—The Surgeon General of the Navy invites the attention of civilian doctors to the opportunity of becoming commissioned officers of the Medical Corps in the U. S. Naval Reserve.

Male citizens of the United States, graduates of class "A" medical schools, who are under 50 years of age and who meet the physical and professional requirements, are eligible for appointment as commissioned officers in the Medical Corps of the Naval Reserve.

Applicants desiring appointments in the Medical Corps of the Naval Reserve should communicate with the Commandant, Ninth Naval District, Great Lakes, Illinois.

* * *

*Salmon Memorial Lectures*—Final dates for the Salmon Memorial Lectures which Robert D. Gillespie, M.D., psychiatric specialist of the British Royal Air Force, will deliver in key cities of this country and Canada, have been announced by C. Charles Burlington, M.D., Chairman of the Salmon Committee on Psychiatry and Mental Hygiene. The schedule of lecture dates is as follows: New York, November 17, 18; Toronto, November 19; Chicago, November 21; New Orleans, November 22; Washington, November 24-25; San Francisco, November 27; Philadelphia, November 30.

Dr. Gillespie has received special leave of absence from the RAF from the British government for the express purpose of delivering the Salmon Lectures in this country and Canada. He will fly here to make a first-hand report to members of the American medical profession and officers of the United States Army and Navy Morale Division on the psychological effects of "blitz" warfare on civilian and armed forces.

Dr. Gillespie's observations made under actual war conditions are expected to be of inestimable value to

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American psychiatrists in formulating plans for maintaining civilian morale in wartime. He will discuss the problems of psychiatry in national defense under the title "Psychoneuroses in Peace and War and the Future of Human Relationships."

A general invitation to members of the medical profession and their friends to attend the lecture has been issued by the Salmon Committee.

## THE DOCTOR'S LIBRARY

*Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

THE CARE OF THE AGED. (Geriatrics) By Malford W. Thewlis, M.D., Attending Specialist, General Medicine, United States Public Health Hospitals, New York City; Attending Physician, South County Hospital, Wakefield, R.I.; Special Consultant, Rhode Island Department of Public Health. Third Edition, Entirely Rewritten, with 50 illustrations. St. Louis: The C. V. Mosby Company, 1941. Price: $6.00.

It is no longer necessary to justify the specialty or the fact that special information is needed in the diseases of the aged. The book is well organized and intelligently written. It is not profusely illustrated but the typographical setup is excellent. This should be of value to any general practitioner.

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CLINICAL IMMUNOLOGY, BIOTHERAPY AND CHEMOTHERAPY in the Diagnosis, Prevention and Treatment of Disease. By John A. Kolmer, M.S., M.D., Dr.P.H., Sc.D., LL.D., L.H.D., F.A.C.P., Professor of Medicine, Temple University School of Medicine; Director of the Research Institute of Cutaneous Medicine; and Louis Tuft, M.D., Assistant Professor of Medicine and Chief of Clinic of Allergy and Applied Immunology, Temple University School of Medicine. Philadelphia and London: W. B. Saunders Company, 1941. Price: $10.00.

These three types of therapy are included in one volume because of the close relationship of infection, immunity, biotherapy, and chemotherapy in the diagnosis, prevention, and treatment of disease. It is written in a more practical form that the usual book covering these subjects. The summaries presented at the end of each chapter bring in interesting paragraphs, important knowledge and evaluations of the present day. The typography is very good; it is not extensively illustrated but splendidly arranged.

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HANDBOOK OF COMMUNICABLE DISEASES. By Franklin H. Top, A.B., M.D., M.P.H., Director, Division of Communicable Diseases and Epidemiology, Herman Kiefer Hospital and Detroit Department of Health; Associate Professor of Preventive Medicine and Public Health, Wayne University, College of Medicine; Special Lecturer in Communicable Diseases and Epidemiology, University of Michigan; Major, Medical Reserve Corps, United States Army: and collaboratory. St. Louis: The C. V. Mosby Company, 1941. Price: $7.50.

This volume should be of special interest to Michigan physicians since Dr. Top is the Director of the Division of Communicable Diseases and Epidemiology at Herman Kiefer Hospital and the Detroit Department of Health. His collaborators are all highly esteemed medical leaders of Detroit. After a discussion of the general principles and specific considerations of the care of these patients the diseases are taken up in a complete but readable description. It is clearly written and well outlined. The chapter on syphilis, which was written by Loren W. Shaffer, presents, in condensed form, an exceptional presentation of the disease. The plates are largely colored and all are well selected. The typography is good and the book is recommended as a reference book by any general practitioner.

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A TEXTBOOK OF BACTERIOLOGY. By R. W. Fairbrother, D.Sc., M.D., M.R.C.P., Director of the Clinical Laboratory, Manchester Royal Infirmary; Special Lecturer in Bacteriology, University of Manchester; Major, R.A.M.C.; Late Research Fellow in Bacteriology, Lister Institute, London. Third Edition. St. Louis: The C. V. Mosby Company, 1941. Price: $5.00.

This is an English book printed in the United States. The material is complete and well organized being more advanced than the usual American textbook of bacteriology. There are a number of excellent colored plates. The typography is excellent and it is recommended as a reference book as well as a textbook.

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SYNOPSIS OF APPLIED PATHOLOGICAL CHEMISTRY. By Jerome E. Andes, M.S., Ph.D., M.D., F.A.C.P., Director of Department of Health and Medical Advisor, University of Arizona, Tucson; Formerly Assistant Professor of Pathology and Clinical Pathology, West Virginia University Medical School; and A. G. Eaton, B.S., M.A., Ph.D., Assistant Professor of Physiology, Louisiana State University School of Medicine, New Orleans. With 23 illustrations. St. Louis: The C. V. Mosby Company, 1941. Price: $4.00.

This is really a handbook on the application of pathological chemistry to clinical medicine. It is very condensed, exceptionally complete, and simply arranged. It avoids most of the controversial points and definitely fixes the relation of the various clinical laboratory tests to the patients. It is recommended for any physician who makes use of laboratory methods in the handling of his patients.

---

THE COMPLETE WEIGHT REDUCER. By C. J. Gerling. New York: Harvest House, 1941. Price: $3.00.

This is a book for popular consumption in which the encyclopedic style is used to present the conservative viewpoint of various legitimate and fraudulent means for reducing weight. The author explodes many of the superstitions and quackeries and also gives some positive sane advice and instructions for those desiring to reduce.

---

NEW AND NONOFFICIAL REMEDIES, 1941. Containing Descriptions of the Articles Which Stand Accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1941. Chicago: American Medical Association, 1941. Price: $1.50.

While this volume lists and describes the articles which stand accepted by the Council on Pharmacy and Chemistry of the A.M.A., it also provides a practical short course in modern therapeutics. It is a much needed reference book for the physician who prefers to practice without complete dependence on the detail man.


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***J.A.M.A., Vol. 93, No. 15, p. 1110, Oct. 12, 1929**
**Bruckner, Die Biochemie des Tabaks, 1936**
****The Military Surgeon, Vol. 89, No. 1, p. 7, July, 1941**

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1. Haiman, Archives of Phy. Therapy, Aug., 1940.
2. Jervey, So. Med. Jl., Mar., 1939.
3. Schmidt, Pennsylvania Med. Jl., Aug., 1939.
4. Dunaway, Jl. Fla. Med. Assn., Sept., 1940.

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*Deceased May 14, 1941

# DON'T FORGET THE VITAMIN Z IN APPLES!

**PAUL McNUTT, Federal Security Administrator, Tells National Nutrition Conference, May, 1941, about Vitamin Z**

"I suggest that the experts — the doctors, nutritionists, educators, home economists and career consumers — also have forgotten a point the advertisers remember. You experts have often forgotten that eating ought to be fun. Something frequently happens to good food when its selection is distilled through the coils of an expert. Food loses its gastronomic gusto. A fellow gets the uncomfortable feeling that he is eating exactly what he ought to and he develops a sort of technological claustrophobia about it. An Indiana farm dinner, steaming on the kitchen table, constitutes about the best concatenation of vitamins ever strung together. That kind of a dinner contains the kind of a vitamin you'd not find in a laboratory — the psychological vitamin of human satisfaction. I'll name it Vitamin Z."

**Apples furnish Vitamins, Minerals, Pectin, Non-Irritating Bulk. Good for you . . . and good to eat.**

**MICHIGAN STATE APPLE COMMISSION**
**LANSING, MICHIGAN**

*Nature Smiles on* **MICHIGAN** *Apples*
**FOR JUICE . . . FLAVOR . . . HEALTH**

# MICHIGAN MEDICAL SERVICE

During the last year the rapid growth of Michigan Medical Service has resulted in administrative problems which have been the cause of some criticism. In a direct approach to these problems, the Board of Directors of Michigan Medical Service at its last meeting appointed Mr. Jay C. Ketchum of Lansing to serve as Manager of M.M.S. Mr. Ketchum has served as Deputy Commissioner and Director of Casualty Insurance under Commissioner of Insurance Eugene P. Berry. He also has had several years' experience as Chief Examiner for the Insurance Department, and as an executive with the Great Lakes Casualty Company, Dearborn National Insurance Company, and other Michigan organizations. He is a native of Michigan and well known in national insurance circles.

Mr. Ketchum's appointment with complete authority over all administrative phases of the operation of Michigan Medical Service, will iron out matters of administrative policy, recently the subject of controversy.

In order to reëstablish the schedule of benefits at 100%, an increase in subscription rates of approximately 25% has been instituted (from 40c to 50c). If actuarial data in the next few months indicate the need for a still higher rate, this will be provided.

The program of Michigan Medical Service which was passed almost unanimously by the House of Delegates and given to the Board of Directors of the Corporation to operate, has presented many complicated and involved problems. The changes already made and those contemplated indicate the eagerness of the Board of Directors of M.M.S. to develop practical mechanics agreeable to all.

### General Motors Coverage

Michigan Medical Service reports an encouraging decrease (almost 1,000) in the number of cases reported in September. If this improved picture continues, M.M.S. will be able to return to full payment of physicians' fees according to its schedule of benefits.

Surgery in the general population runs only 40 cases per 1,000, whereas surgery with Michigan Medical Service groups has been running to 139 cases per 1,000. This experience in the first six months of newly enrolled groups taxes severely the reserves of Michigan Medical Service but incidentally reveals that 3½ times more operations are performed under the M.M.S. program than are performed in the general population.

Since the beginning of Michigan Medical Service twenty months ago, the rapid acquisition of numerous large groups has caused the high incidence of services rendered and has been largely responsible for the proration of the schedule of benefits. Obviously, when the seasoning period (the initial period of high demand) will have been passed, the full schedule of benefits can be reinstated and sufficient reserves developed to allow for the payment of the percentage withheld (20 per cent). In General Motors and previously enrolled groups, a small percentage of subscribers over the income limits has been enrolled. Their identification cards will be clearly marked to indicate this fact, in which case the physician is permitted to charge the difference, if any, between his usual private fee for persons in this group and the schedule of benefits of M.M.S. Subscribers definitely understand this provision and are satisfied with the arrangement.

The GM *employes'* participation in a commercial insurance program during the past two years makes them a well-seasoned group which should result in a low incidence of service demands.

It much be appreciated that Michigan Medical Service is a young corporation and that perfection can be had only through a process of evolution. Its initial development was occasioned by a consumer demand for a program protecting the low-income workers against catastrophic illness. This demand will have to be met, either by coöperative efforts of the medical profession, or by political or social agencies. Would a political or social program be consistent with the democratic practice of medicine and preserve its traditions?

### 100 Per Cent Payments

Payments for October services were made by Michigan Medical Service according to 100 per cent of its Schedule of Benefits.

# The Sickle Has Lost Its Edge

SLOWLY BUT SURELY, MEDICAL SCIENCE IS CONQUERING SYPHILIS

**Mapharsen offers a record for effectiveness and safety as an antiluetic which has not been surpassed by any other arsenical since the days of Ehrlich. The proof lies in the more than ten million intravenous injections administered over a seven year period.**

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**Mapharsen (meta-amino-para-hydroxy-phenylarsine oxide hydrochloride) contains 29 per cent arsenic in trivalent form. It does not become more toxic in the ampoule, in the solution, in the body, or when exposed to air.**

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# HALF A CENTURY AGO

## LA GRIPPE*

B. B. GODFREY, M.D.
Hudsonville, Michigan

Without giving the history of this disease, I will begin this paper by asserting that I believe la grippe should be classed with zymotic diseases.

Having this epidemic among us, how shall we diagnose it and how treat it?

Probably as safe and scientific a procedure in diagnosing this disease, until the microscopist shall have been successful in discovering the microbe and isolating its ptomaine or poison, is by elimination. Exclude bronchitis, asthma, and malaria, and, with the patient complaining of headache, a sense of construction of the thoracic muscles, labored breathing, dizziness, loss of appetite, and almost invariably constipation, with more or less prostration, and the characteristic "pain all over," and you are reasonably sure of a case of la grippe. I have seen some cases where the patient seemed suffering as from shock; later, very high temperature with profuse sweating. In some, the heart fails to do its duty, and in a number of cases with hyperpyrexia have the patients become delirious, later more or less bronchial trouble, with, now and then, a case complicated with pneumonia.

It has been said that this disease indiscriminately manifests itself among the strong and well, the weak and diseased. This, my experience tells me, is not true. I have yet to see the first case where the patient was, prior to his attack, in a condition approaching that of normal; he may, to casual appearance, be well, but a few questions will convince one that the system was not in equilibrium, that the balance was overburdened on one side with some systemic product not appropriated or eliminated, leaving the subject in a proper condition for some zymotic disease.

With these conditions, what are the indications?

Ostensibly to restore the patient to a normal condition; but how? It has been my practice almost invariably, to give calomel, or its nephew, gray powder, with an alkali, and get a free movement of the bowels and stimulate the kidneys and other glands of the system. This I do, believing the mercury not only does this but acts as a germicide. For pain I give acetanilide or antikamnia, and while subduing that, at the same time and by the same means, reduce the temperature if necessary. In one instance I found it necessary to place my patient on ice (the temperature remaining for three days above 105° F., with constant delirium). This I did by putting pounded ice on a blanket, folding it, and then placing the patient on this bed of ice extending the length of the spine. All other means at my hands failed to tranquilize the patient or reduce the temperature, but in six hours my patient was in a fair way to recovery, and in a few days was up, but very weak. In those cases of nervous manifestations, and we get many of them, I have found the bromides of little utility, some preparation of morphine answering the purpose better. In case of heart failure, digitalis, as a heart stimulant, with carbonate or muriate of ammonia for the almost always attendant bronchial symptoms, are indicated. Quinine has been lauded by some, but at my hands has not been beneficial, except when this disease has been complicated with malaria, which, in some localities, is frequently the case. On the other hand, I am quite sure I have seen some serious results from over-dosing with this drug, combined with whisky, which, last year in particular, was a popular remedy with the laity. Many of the patients, while convalescing, were greatly benefited by Scott's emulsion, though generally some simple tonic would be all that seemed necessary, with hygienic surroundings and a liberal diet of nutritious food.

### Discussion

Dr. Henry B. Baker: I can hardly hope to say very much on this subject that will be of practical use to you as practitioners; but I would like to present some facts that have come to my notice, because of the reports from practitioners throughout the State. Most of you know that a large number of the leading practitioners of the State report to the State Board of Health, once a week, the diseases which come under their observation. These reports are compiled, and tables made, and diagrammatic curves are made, showing the increase and decrease, the rise and fall, of each of the important diseases. The disease called, by the author of the paper, la grippe, is not often reported under that name. It has been reported to the State Board of Health as influenza. It seems to me that this is a good name for the disease. If the disease which many of the leading practitioners in Michigan report to the State Board of Health as influenza is la grippe, then we have a picture of that disease as it is found in the state; and if it is, as the author of the paper expresses the belief, a communicable disease, zymotic, its specific cause must be one that is constantly present in the State of Michigan, for the reason that the reports to the State Board of Health show that the disease is present in Michigan in every month in every year. I have made no special preparation to speak on this subject; in fact, I did not know, or had forgotten, I was to speak until I saw my name on the programme, or I should have prepared a larger diagram to illustrate what I intend to say. Those of you who are sufficiently near to see this small diagram, can see that the disease known as influenza, and so reported to the State Board of Health, is most prevalent in February, when it reaches its maximum inten-

*(Continued on Page 950)*

*Delivered at the Twenty-Sixth Annual Meeting of the Michigan State Medical Society held at Saginaw, June, 1891.

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*(Continued from Page 948)*

sity; then declines rapidly, and reaches its lowest point in July, and then rises again until February. It does that, as a rule, every year. This temperature curve you see is practically the curve for influenza; the lowest temperature, however, is a month earlier than the time of most influenza. It is apparent, however, that the temperature alone will not cause influenza. I have no fault to find with the statement of the author of the paper that it is a communicable disease, but I make the point that bacteriologists in searching for its specific cause should not search for a micro-organism that is uncommon. If influenza is the disease under consideration, and is a specific disease, the micro-organism that causes it is present in Michigan in every month in every year.

In looking up the literature on the subject, I find that all persons who have reported making microscopical examinations in this disease have found a common micro-organism in every instance. This is the common pus-generating micro-organism—the streptococcus pyogenes. Some of the bacteriologists say that this cannot be the specific cause of the disease, because it is such a common germ. But, it seems to me, that if influenza is caused by a micro-organism it must be caused by one, or more, of the common ones.

There is an element of the atmosphere that is closely associated with influenza, and that is atmospheric ozone. It stands even in closer relation to influenza than the atmospheric temperature does. When the atmospheric ozone is in excess, the influenza is more than usually prevalent. At the time of the last epidemic, which we have just passed through, the meteorological observers who report to the State Board of Health, reported the presence in the atmosphere of a greater quantity of ozone than has ever before been reported, and the influenza has reached a higher point than has ever before been recorded. The relation which atmospheric ozone sustains to influenza, by months, is exhibited in the diagram which I show you, and which contains the evidence for Michigan for the twelve years, 1877-88.

Dr. G. W. Chrouch: I would like to ask Dr. Baker if the conditions of influenza have been present every year for a great number of years. There has prevailed an idea throughout the community at large that we are only "blessed" with an occasional visitation of this trouble; that it does not occur every year.

Dr. Baker: I think I stated that the disease was reported to the State Board of Health as occurring every February, in fact in every month of every year, reaching its maximum in February, and its minimum point in July. Of course, in some years it is higher than in others. In February, 1890, it was unusually prevalent, and still more prevalent during the spring of 1891.

Dr. Chrouch: I presume every member of the profession has had more or less to do with what is improperly called la grippe. I am an English-speaking person myself, and prefer to use the English term to designate the disease under consideration. There is no difference between what is known as la grippe and our old English disease, influenza; and I agree with the writer of the paper in a great many of the points he has made. I think, in order to control the general muscular pains experienced in this disease, that some preparation of opium is the best. I have tried other things, but my experience has been that some preparation of opium would control the muscular pain better than anything else. I think antipyrine may be used to control the hyperpyrexia.

As regards the use of mercury as a cathartic and stimulant to the glandular system, I have not tried it very much.

I had an unexpected experience last winter. The influenza resulted in paralysis of the stomach and bowels, and before I had discovered the paralysis of the stomach I found I had a distended stomach. It was filling below the ensiform cartilage to umbilicus. I took my fingers and worked it back, and it would stay but a short time. The woman declared that her stomach was bad. I resorted to nux vomica, and continued to give the nux until I became alarmed. Shortly after administering nux vomica a catarrhal cough came on. On one occasion the woman rolled over to vomit. I held her head in my hand, it did not go below the body in general, but there poured out of her stomach more than half a gallon of liquid. Immediately after, I made an examination for distended stomach and could not find it. Everything then began to act. How far the nux vomica I had given had become absorbed by the paralyzed stomach, I do not know, but I still believe it had something to do with the recovery of the case. Very shortly after this occurred, the whole system seemed to be at its maximum again; recovery was quite rapid. To control the hyper-pyrexia, I have relied largely on antifebrin, sometimes giving capsules of Dover's powder to relieve pain and swelling.

Dr. V. C. Vaughan: I wish to say one or two words on this subject. I find there is a great deal in a name after all. I think we have been very unfortunate in naming this disease. The author of the paper has called it la grippe. I must say that I can find no reason for any such name as has been given the disease.

I saw a statement in an editorial in a leading medical journal a short time ago that this was a French word, gripper, which means to grasp, to grip. But if any of you will turn to Hirsch's famous work on "The Geographical Distribution of Disease," you will find it is not named by this French work at all; that this disease appeared in France a number of years ago simultaneously with a new insect, and the insect was called la grippe, and as the disease and insect made their appearance at the same time, it was believed by the superstitious people of the age that the insects brought the disease with them, and for that reason the name was attached to it. There is no reason for continuing the name.

Now, as to the word influenza, there is no doubt, I think, as Dr. Baker has remarked, that we have this disease with us more or less all the time, but there is a difference between it and the ordinary influenza. We may call it epidemic, or a pandemic or influenza. The whole civilized world has been visited a number of times by this disease, and there are some interesting points known about its spread. In the first place it has invariably traveled from east to west; it makes its pandemic excursions at normal regular periods. I have heard the older physicians speak of its prevalence during the former Harrisonian campaign (grandfather to the present President of the United States).

So far as my observation goes in studying the disease clinically, it is nothing more or less than the ordinary influenza which becomes epidemic or pandemic.

We meet with many peculiar forms of the disease. The case of Dr. Chrouch cited is an interesting and peculiar one. I saw two or three cases accompanied by complete anesthesia. I suppose these peculiarities are accounted for from the fact that a great number of people have been attacked. There are very few persons who have escaped it. The more prevalent the disease, the greater the number of persons attacked, and the greater the number of peculiarities you will find, due to the idiosyncrasies of the patients.

There are some things connected with the disease which cannot be reconciled with the idea that it is due to a specific germ. There are well authenticated cases where a ship, for instance, leaving port was not

*(Continued on Page 952)*

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*(Continued from Page 952)*

infected until it had been for weeks at sea. I remember one instance—I forget the name of the ship—where the ship left port and the people were not infected at the time, but had been at sea twelve days when the disease suddenly appeared and affected all on board. It is difficult to explain this if we believe in a specific micro-organism. Bacteriologists, as a rule, do not believe that micro-organisms are prevalent at sea.

Culture tubes exposed to sea air for a length of time have practically remained sterile. There seems to be some meteorological condition of the atmosphere which gives special virulence to the germ which is constantly with us, and so virulent does the germ become that nearly all are attacked. It seems to me that is the most rational explanation we can give for it, taking into consideration the various facts we have ascertained concerning it.

Of the two names in use, I think the term influenza the better one. There are twenty or thirty claimants for the discovery of the germ, but no one has conclusively demonstrated his claim. I say it is different from the ordinary influenza, in that it becomes highly virulent or epidemic at times. It is on account of some widely prevalent conditions of the atmosphere, attacking a large number of inhabitants.

Dr. Chrouch: Have you resorted to any means, Dr. Baker, to ascertain the condition of the atmosphere during these periods?

Dr. Baker: If permitted to speak again, I will say that I have, and have recorded the results in a paper which I prepared about a year ago, but which has not been published. I searched the records of all the epidemics of which the records were available, and the most constant meteorological condition that was found present was an unusual amount of wind, and wind from an unusual direction. That was true of the epidemic last year. It began at St. Petersburg; about two weeks before the outbreak occurred there, the wind, which at that time of the year is usually from the southwest, had been from the northeast, sweeping down from northern Siberia and the Arctic ocean. At. St. Petersburg the relative humidity of the atmosphere was thus greatly lowered below the normal. This was considered one of the greatest epidemics they ever had, and it was carefully studied, because it occurred sufficiently late, and that I was able to get, from the chief signal officer of the United States, the exact records of the meteorological conditions at St. Petersburg.

Now, as regards the recent epidemic in Michigan, which was the greatest of which we have any record, we very carefully worked out the meteorological conditions in the State; and in the last quarterly bulletin of the State Board of Health (that is, the "Proceedings" of our meeting in April, 1891), the meteorological conditions are carefully stated: The wind came from an unusual direction, from a colder source than usual, and the ozone was excessive, especially in the night time. And I want to say, while I am on my feet, that the irritating gas in the atmosphere which is known as ozone, seems to be very easily destroyed. Our records seem to show that the shutting down of mills, furnace fires, etc., over Saturday and Sunday, influence it; and we know that it is easily broken up, the three atoms of oxygen, of which ozone is composed, taking their places as ordinary oxygen. The day ozone is not so regular in its effects upon our tests; our record of it does not sustain the same regularity of relation to diseases of the throat and air passages as does our record of the night ozone. The atmospheric conditions during the night are not interfered with so much by fires and other artificial measures as during the day. During the last epidemic the meteorological conditions have been very different from those that have existed in other years, and sufficiently different to explain, to my mind, the epidemic.

Dr. A. W. Alvord: I have been profoundly interested in the remarks of the gentlemen in relation to this subject; yet Dr. Baker's statements are chiefly a nullity so far as they refer to what the disease really is. He is not like the practicing physician who meets with a large number of cases every day, but he is receiving the reports from hundreds of physicians all over the State, who have certain cards upon which are printed the names of diseases. For a good many years I have replied to Dr. Baker's letters of enquiry every week. I put down influenza as we had it, but it was not the influenza we have had the past year and the year previous. It was nothing like our present epidemic, even if I accept Dr. Vaughan's suggestion that an endemic condition is similar to an epidemic condition.

During the many years that I have practiced, I would like to know when we had an endemic or epidemic of influenza that produced the results we are getting this year from this disease. Some have been afflicted with paralysis and others with marked neurasthenia, Bright's disease, and a hundred other peculiar conditions that we find following it which I cannot mention at present.

I saw a case, a week ago Sunday night, stricken down with paralysis, as marked a case of hemiplegia as I ever saw. Before he was removed to his home and bed, he had lost not only the use of his legs, but right arm, and speech left him within the next two hours. There was no ability to move his head nor to open his mouth, and the only set of muscles controlled were those of the left arm. The gentleman who first saw him was sure there was a lesion within the brain—that this microbe, I do not care what you call it, affects the nerve centers primarily; consequently you can understand how you get marked benefit from strychnia. A blister was applied on this gentleman's neck, he was given a good dose of calomel, and in three days we had him sitting up, and in a few days more he was able to walk around. A short time afterwards he had a similar attack, which lasted three or four days, and then he was up again.

The conditions have been present from year to year in its original home. About sixteen months ago it was transferred across the ocean. I am not surprised at all that observers should have met with micro-organisms, and that the disease suddenly attacked people on board a ship, as stated by Dr. Vaughan.

I have not sufficient time to go fully into this subject, but the remarks have been of special interest to those who want to know what we have got—what we are dealing with. I do not think any of us know that, and until we do know we are not going to treat the disease successfully. We may treat it symptomatically, of course, and we may give acetanilid to control fever. Nux vomica and calomel are of great benefit in these cases. But what is the cause? Until we find out the true cause of the disease we are groping in the dark.

Dr. V. C. Vaughan: Dr. Alvord has said that the disease this year has been different from previous years, in that it has been more severe, and the symptoms following the disease more variable, and so on.

Hirsch gives an account of an epidemic occurring in 1847-48. It was called Italian grip; it was not so violent in its manifestations and the country was more thinly settled.

There is another thing: I am sure we are inclined to attribute everything that occurs now to influenza. We date everything medically one year or more back. Hardly a man comes into our office with a headache or broken leg but says it is due to the grip. I want to insist on a point I made before, that the greater the number sick with any disease, the greater the variety of symptoms, owing to the greater number of idiosyn-

*(Continued on Page 960)*

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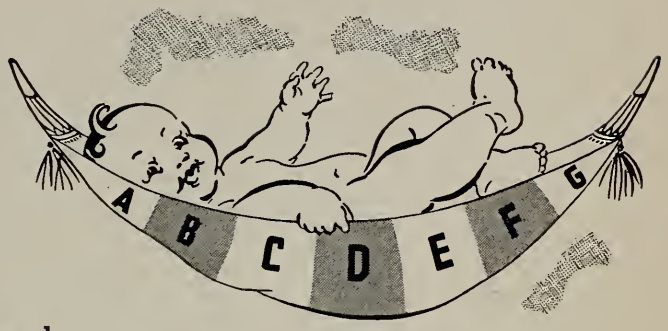


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The increase of number of divorces and broken homes in the United States makes another phase of marriage education imperative. There is a tendency at the present time to place too much importance on the physical side of marriage. It is important, but not all important. Each party to a marriage should understand that love, good old fashioned love, not just a passing whim, must exist.—Harrison Smith Collisi, M.D., Grand Rapids. (See page 965.)

## SULFATHIAZOL IN EXFOLIATIVE DERMATITIS

A case of wet exfoliative dermatitis associated with hemolytic Staphylococcus aureus septicemia in a child of fifteen months is reported. It is suggested that epidermolysis may be a symptom of septicemia and that the two children's diseases showing this phenomena, namely Ritter's disease and pemphigus neonatorum, may be related staphylococcic septicemias. Chemotherapy now seems to be the treatment of choice.—Henry K. Baker, M.D., Flint. (See page 969.)

## MOVEMENT FOR THE REGISTRATION OF VITAL STATISTICS

Prior to 1850 the only available statistics of Michigan consisted of census returns made in 1840 by the federal government. This was the first census of Michigan as a state. In 1856, a law was enacted which required the registration of marriages, but it was carelessly observed. Following the close of the Civil War many people claimed pensions and made demands upon the federal government because of relatives injured or killed during the war. Suffice it to say, government officials were confronted with an imperfect record system and could not answer their requests for information concerning the date of birth of the relative under consideration. As a consequence physicians about the state and other civic-minded persons became interested and set about to draft a bill to provide for the registration of births, deaths, and marriages. The bill was finally approved by the legislature and became a law on March 27, 1867.—Earl Kleinschmidt, M.D., Dr.P.H., Chicago. (See page 971.)

## PRESACRAL RESECTION FOR THE RELIEF OF PAIN PRESUMABLY DUE TO A CONGENITAL UTERINE ANOMALY

After conservative treatment had failed to relieve a patient's suffering from dysmenorrhea associated with uterus didelphis unicolis, operation was advised. A presacral resection was performed since the elements of the anomaly were symmetrical and functioning. Relief of the patient's symptoms has been effected, since she has been free of dysmenorrhea since the operation.—John C. Scully, M.D., Menominee. (See page 979.)

## THE RELATIONSHIP OF THE ROENTGENOLOGIST TO THE SURGEON

It has been stated that the roentgenologist has four inseparable friends—the anatomist, pathologist, internist and surgeon, and one more should be added—the physiologist.

The physician and surgeon should not shed his responsibility and expect the roentgenologist to make the diagnosis for him. The roentgenologist should be considered in the light of a highly skilled physician of coöperation and coördination, one of the important highways to reach the destination of a workable diagnosis and possible cure, and not the atlas around which the medical and surgical diagnosis spins.—Leon M. Bogart, M.D., Flint. (See page 981.)

## THE PHYSIOLOGY OF THE NOSE

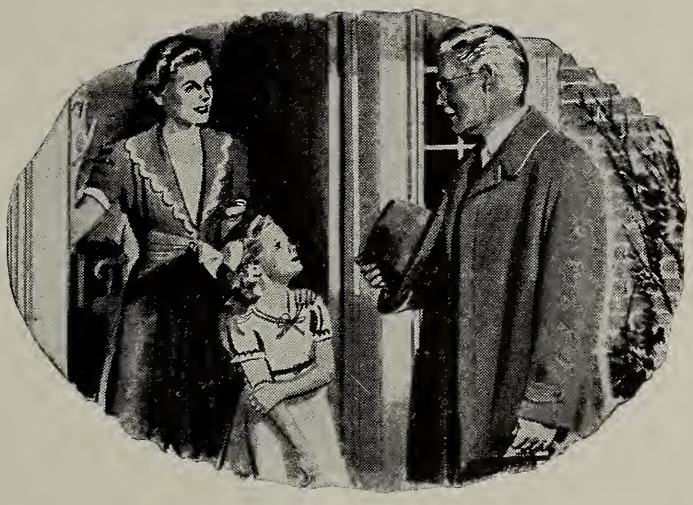
Many of the nasal physiologic processes are considered to aid in the evaluation of symptoms of patients. The efficiency of the nasal mechanism is found to vary in different individuals and at different ages. The importance of the pH of nasal mucus is considered as well as the factors influencing it. The function and drainage of nasal mucus is reviewed. Emphasis is placed on the interrelationship between the nose and the rest of the body.—Dewey R. Heetderks, M.D., Grand Rapids. (See page 983.)

## THE SUCCESSFUL USE OF SULFANILAMIDE IN BLACK WATER FEVER

This is a report of a case of black water fever occurring in a missionary from Africa while visiting Northern Michigan.

A thirty-six-year-old woman was admitted to

*(Continued on Page 956)*



**Q.** Of course, we eat canned vegetables. But just what is their value in a diet?

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1936. Mass. Agr. Expt. Sta. Bull. No. 338.
1937. Chemistry of Food and Nutrition, Fifth Edition, H. C. Sherman, MacMillan, N. Y.
1938. Nutrition Abstracts and Reviews 8, 281.
1939. Food and Life Yearbook of Agriculture, U. S. Dept. Agr., U. S. Government Printing Office, Washington, D. C.

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*(Continued from Page 954)*

the hospital with temperature of 108.4 degrees, axillary, complaining of black urine, chills, and prostration.

In spite of thirteen blood transfusions and the use of several types of recognized therapy, the hemoglobinuria continued and red blood count reached a low point of 610,000 with hemoglobin of 10 minus. Sulfanilamide was given when the patient was obviously terminal with dramatic results and full recovery.

A cholecystostomy was done two months after the onset with removal of blood pigment stones from the gall bladder.—Benton A. Holm, M.D., Cadillac. (See page 988.)

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**X-RAYING MILITARY MEN**

Experience in the First World War taught us the importance of discovering tuberculosis among military men. When the Selective Service Act went into effect, the Navy was requiring a chest roentgenogram for all enlisted and commissioned men, and the Army for the commissioned personnel only; facilities for routine roentgenography of all men were not at first available. Among the civilian agencies which supplemented the efforts of the Army in this emergency was the Bureau of Tuberculosis of the New York City Department of Health. A record of that organization's experiences is published in the *Journal of the American Medical Association* from which the following abstracts are taken.

An order issued October 28, 1940, by the Adjutant General's Office of the United States Army made it possible for civilian organizations to set up a roentgenographic service for men inducted into the Army. It provided for payment for x-ray films and for the services of civilian roentgenologists (under due control) until such time as the Army could assemble its equipment and assume full responsibility.

The Bureau of Tuberculosis of the New York City Department of Health has been engaged in mass roentgen-ray surveys of the apparently healthy population since 1933. These surveys have been accepted as a basic part of the tuberculosis control program of New York City and thus interest, based on experience, in providing a similar service for inductees and members of the State National Guard was rife. Accordingly, the Bureau's mass roentgen-ray services which were made possible through the WPA, were offered to the Surgeons of the Second Corps Area prior to the Adjutant General's directive that was issued on October 28, 1940. Financial assistance was received from the tuberculosis associations of Queens and the Bronx.

After January 1, 1941, the Army assumed full financial responsibility for the roentgen-ray service in induction centers. The Department provided personnel for the interpretation of films. Since January 15 this service has also been taken over by the Army, which has assigned medical reserve officers qualified in this special field. The roentgenographing of National Guardsmen has been entirely at the expense of the Department of Health. Under existing regulations the Army could not pay for this service until after induction, and it was important that rejections be made before induction.

At the outset there were four induction stations. Since January 1, 1941, all work has been done in two stations, one in Manhattan and one in Queens.

Those rejected men who were residents of New York City were given an appointment within the next two or three days to appear at the Health Department's Central Chest Clinic, where a complete study of the case was made. If this examination proved the original findings to be of no significance, the local draft board was so notified.

Rapid roentgenographic service was necessary as the recruit was supposed to be cleared through all examinations by 2:30 p.m. of the day he reported at the induction station. With from 60 to 300 men per unit to be handled daily, even the rapid roll method used in the routine survey program was inadequate. Consequently a special type of apparatus was devised. A modification of the roll paper camera was used in connection with a specially constructed portable darkroom measuring 8 by 8 feet with the back of the camera integrated into one side of the darkroom. A signal device was installed between the roentgen ray technician and the darkroom. As soon as a film was exposed, the signal was flashed and the darkroom crew cut off the film and placed it in the developing bath. The signal was then reversed indicating that another film was ready to be exposed. A team of three, consisting of a technician and two darkroom assistants, were able to operate faster than one exposure a minute. The films were processed in large trays and from the fixing bath were passed out to the physician through a light-proof pass. After being read, the films were washed in a portable tank and dried in a special device designed for the purpose.

Acceptance or rejection was based on Army regulations. Men showing any form of reinfection types of tuberculosis were rejected because lesions of such types may become aggravated under conditions of military service. Primary lesions considered as active or extensive calcifications were likewise cause for rejection. Other forms of significant pulmonary disease, such as bronchiectasis, pneumonitis, atelectasis or extensive pleural changes, were caused for rejection until further study could determine their importance. Men with obviously abnormal cardiac silhouettes were reported to the medical examiners for such further study as might be indicated. Men with nothing more than apical caps, and those with small well-healed primary lesions were not rejected.

The group of men examined up to January 15, 1941, during which the Department of Health was actively engaged in the program, included 6,609 inductees and 9,541 Guardsmen, a total of 16,150 individuals who were x-rayed.

Of the inductees, 1.36 per cent were rejected and of the Guardsmen, 1.21 per cent. About one-third of the Guardsmen were below the age of twenty-one, while only about 0.5 per cent of the inductees were below that age. An all-Negro regiment (National Guard unit) had the highest mean age in all groups and the highest rate of rejection, which was almost entirely on the basis of pulmonary tuberculosis. If the findings in this unit are subtracted from the totals of all Guard units a greater difference will be found between Guardsmen and inductees.

Classification by stages of disease of the seventy men considered clinically significant shows that 65.7 per cent were minimal, 32.9 per cent moderately advanced and 1.4 per cent far advanced. Primary lesions indicated by calcific deposits were found in 6 per cent of the white men, 8.7 per cent of the Negroes and 7.1 per cent of the Puerto Ricans.

The group of men examined since January 16 and through March 31, 1941, totaled 35,210 men. During that period the Department of Health's part has been

*(Continued on Page 958)*

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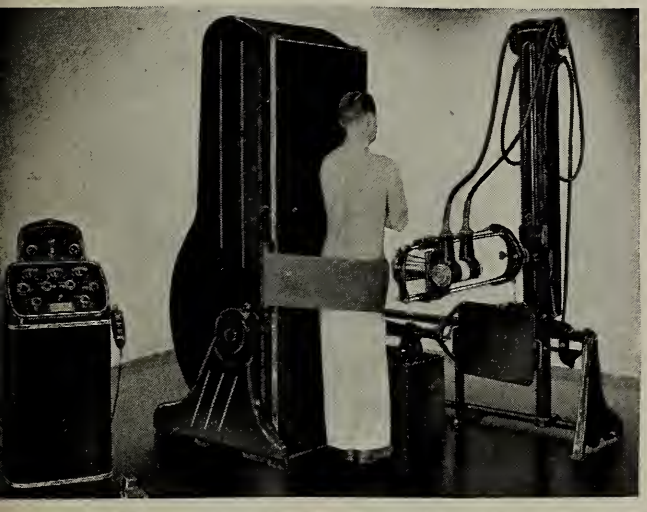

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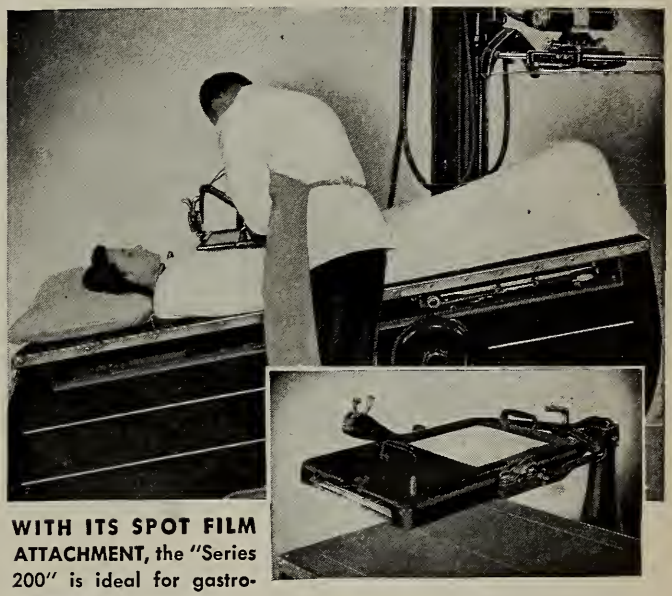

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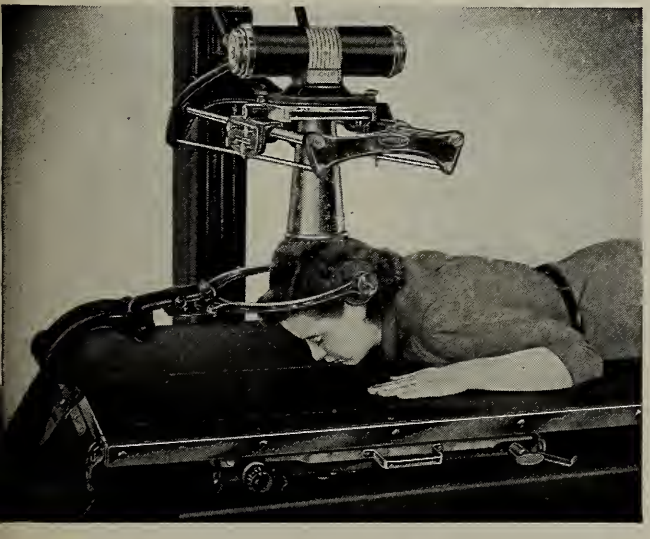

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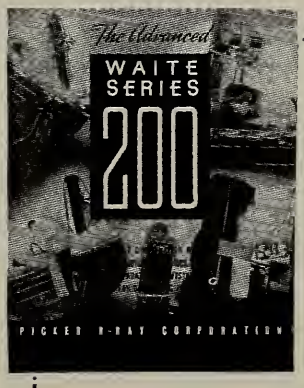


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*(Continued from Page 956)*

to reëxamine and classify New York City men rejected at the induction center. In this time 458 men have been rejected, 379 of whom have thus far been cleared at the Health Department Clinic. In forty-nine, or 12.9 per cent of those reëxamined, the cause for rejection at the induction station was not confirmed and the man was considered suitable to be accepted in the Army from the standpoint of his roentgenogram.

A detailed cost analysis of personnel, equipment and materials necessary to complete this study indicated a total of $23,614.20. Using this as a basis for computation, the unit cost to examine each individual by roentgenogram was $1.47. (The cost of taking a roentgenogram and its interpretation without any further follow-up was $13,911.20, or 58.8 per cent of the total.) The unit cost of rejecting a man for military service on the basis of the total cost was $106.02 for inductees and $122.37 for Guardsmen.

Spillman has reported that the cost to the federal government of accepting a person with tuberculosis into the armed service is $10,000. Thus, in these studies involving 41,819 inductees and 9,541 Guardsmen, or a total of 41,360 men, 561 persons with chronic pulmonary tuberculosis were rejected, representing an estimated saving to the government of $5,610,000.

*Examinations for Tuberculosis by Herbert R. Edwards, M.D., and David Ehrlich, M.D., Jour. of Amer. Med. Assn., July 5, 1941.*

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## FOURTH ANNUAL FORUM ON ALLERGY

The Fourth Annual Forum on Allergy will be held this year in the Statler Hotel, Detroit, Michigan, on Saturday and Sunday, January 10 and 11, 1942. On the Friday preceding there will be clinics at the University Hospital in Ann Arbor, Michigan, conducted by Dr. John M. Sheldon and the staff. All reputable physicians are most welcome at The Forum where they are offered an opportunity to bring themselves up to date in this rapidly advancing branch of medicine, through two days of intensive postgraduate instruction; for instance, the twenty study groups, any four of which are available to each attending physician, will be given continuity in that one series deals with Otolaryngology, Ophthalmology, Pediatrics, Internal Medicine, and Dermatology—each running consecutively.

Attention is called to the fact that during these two days almost every type of instructional method will be employed by the forty-six physicians appearing on the program.

Special lectures by outstanding authorities; symposia followed by a twenty-minute question and answer period; presentation of patients and a free discussion of their management; charts and educational exhibits; motion pictures and colored transparencies; the results of research; and, finally, an "Information on Allergy, Please?" where any question which has not been answered in the two days may be asked of competent authorities.

The second award of The Forum's Gold Medal for outstanding contributions to clinical allergy will be made this year to W. W. Duke, M.D., of Kansas City, Missouri, who well may be called "the father" of this subject.

Men from Michigan taking part in the program are: Samuel Levin, Detroit; Franz Blumenthal, Detroit; Frank Menagh, Detroit; George L. Waldbott, Detroit; Harvey Johnston, Ann Arbor; John M. Sheldon, Ann Arbor; Stanley Insley, Detroit; Meryl Fenton, Detroit, and Meyer Ascher, Detroit.

Physicians desiring a program or further information may address the Director, Jonathan Forman, M.D., 956 Bryden Road, Columbus, Ohio.

## CREDIT IS DUE

The following members of the Michigan State Medical Society registered at the 76th Annual Convention and exhibition held in Grand Rapids, September 16, 17, 18 and 19, 1941. The list of those registering on Tuesday, September 16, follows:

George T. Aitken, Grand Rapids; J. K. Altland, Hastings; W. H. Alexander, Iron Mountain; Ralph V. Allen, Grand Rapids; Harvey M. Andre, Grand Rapids; J. H. Andries, Detroit.

Milner S. Ballard, Grand Rapids; Wm. R. Ballard, Bay City; W. D. Barrett, Detroit; Gaylord S. Bates, Detroit; Martin Batts, Jr., Grand Rapids; T. I. Bauer, Lansing; M. G. Becker, Edmore; W. Clarence Beets, Grand Rapids; H. M. Best, Lapeer; W. L. Bird, Greenville; H. M. Blackburn, Grand Rapids; Frank A. Boet, Grand Rapids; Walter H. Boughner, Algonac; Donald R. Brasie, Flint; Horatio A. Brown, Jackson; James D. Bruce, Ann Arbor; C. F. Brunk, Detroit; Jacob H. Burley, Port Huron; Volney N. Butler, Detroit.

A. L. Callery, Port Huron; A. M. Campbell, Grand Rapids; A. E. Catherwood, Detroit; L. G. Christian, Lansing; Harry L. Clark, Detroit; Robert W. Claytor, Grand Rapids; Harrison S. Collisi, Grand Rapids; B. L. Connolly, Detroit; T. S. Conover, Flint; Henry Cook, Flint; W. B. Cooksey, Detroit; C. A. Cooper, Hancock; Burton R. Corbus, Grand Rapids; Wm. J. Cosgrove, Grand Rapids; George J. Curry, Flint.

E. N. D'Alcorn, Muskegon; Ernest W. Dales, Grand Rapids; Milton A. Darling, Detroit; David B. Davis, Grand Rapids; Luther W. Day, Hillsdale; Dean C. Denman, Monroe; Isla G. DePree, Grand Rapids; J. DePree, Grand Rapids; C. F. DeVries, Lansing; H. F. Dibble, Detroit; C. A. Dickinson, Wayland; Douglas Donald, Detroit; James C. Droste, Grand Rapids; Fred Drummond, Kawkawlin; C. E. Dutchess, Detroit.

Charles E. Farber, Grand Rapids; Lynn A. Ferguson, Grand Rapids; Gordon F. Fisher, Hastings; E. O. Foss, Muskegon; G. H. Frace, St. Johns; H. A. Furlong, Lansing.

Harold H. Gay, Midland; L. O. Geib, Detroit; Louis W. Gerstner, Kalamazoo; Orla H. Gillett, Grand Rapids; Frank A. Grawn, Traverse City; I. W. Greene, Owosso; T. K. Gruber, Eloise; A. B. Gwinn, Hastings.

A. T. Hafford, Albion; Don V. Hargrave, Eaton Rapids; F. W. Hartman, Detroit; C. K. Hasley, Detroit; C. L. Hess, Bay City; L. J. Hirschman, Detroit; T. E. Hoffman, Vassar; M. H. Hoffmann, Eloise; William A. Hyland, Grand Rapids.
C. F. Ingersoll, Grand Rapids; S. D. Insley, Detroit.
R. C. Jamieson, Detroit; L. J. Johnson, Ann Arbor.

J. A. Kasper, Detroit; Thos. R. Kemmer, Grand Rapids; C. S. Kennedy, Detroit; C. R. Keyport, Grayling; M. R. Kinde, Battle Creek; D. K. Kitchen, Grosse Pte. Pk.; P. W. Kniskern, Grand Rapids; Leo O. Knoll, Ann Arbor; H. J. Kullman, Detroit.

Bertil T. Larson, Pontiac; P. L. Ledwidge, Detroit; C. E. Lemmon, Detroit; Robert T. Lossman, Traverse City; S. L. Loupee, Dowagiac; Henry A. Luce, Detroit.

Alexander M. Martin, Grand Rapids; Robert J. Mason, Birmingham; S. C. Mason, Menominee; Fred G. Mayne, Cheboygan; L. M. McBryde; S. S. Marie; Allan McDonald, Detroit; Maurice McGarvey, Blissfield; R. M. McKean, Detroit; C. M. Mercer, Battle Creek; J. Duane Miller, Grand Rapids; John J. Miller, Marne; Frederick B. Miner, Flint; H. C. Mitchell, Grand Rapids; L. J. Morand, Detroit; H. Allen Moyer, Lansing; Dean W. Myers, Ann Arbor.

W. E. Nesbitt, Alpena; H. V. Norgaard, Marlette; F. O. Novy, Saginaw; R. L. Novy, Detroit.

C. W. Oakes, Harbor Beach; E. A. Oakes, Manistee; D. J. O'Brien, Lapeer; J. J. O'Meara, Jackson; E. A. Osius, Detroit.

C. Allen Payne, Grand Rapids; R. C. Peckham, Gaylord; G. C. Penberthy, Detroit; Ralph A. Perkins, Detroit; Henry E. Perry, Newberry; Ralph H. Pino, Detroit; Horace Wray Porter, Jackson; Anthony M. Putra, Detroit.

Carl S. Ratigan, Detroit; Frank E. Reeder, Flint; Wm. S. Reveno, Detroit; H. H. Riecker, Ann Arbor.

Gilbert B. Saltonstall, Charlevoix; E. W. Schnoor, Grand Rapids; Donald M. Schuitema, Grand Rapids; H. T. Sethney, Menominee; Bert H. Shepard, Lowell; C. E. Simpson, Detroit; William J. Slasor, Ann Arbor; C. C. Slemmons, Grand Rapids; W. Joe Smith, Cadillac; Carl F. Snapp, Grand Rapids; Geo. H. Southwick, Grand Rapids; E. D. Spalding, Detroit; R. A. Springer, Centerville; Wallace H. Steffensen, Grand Rapids; A. E. Stickley, Coopersville; Wm. F. Strong, Ontonagon; O. D. Stryker, Fremont.

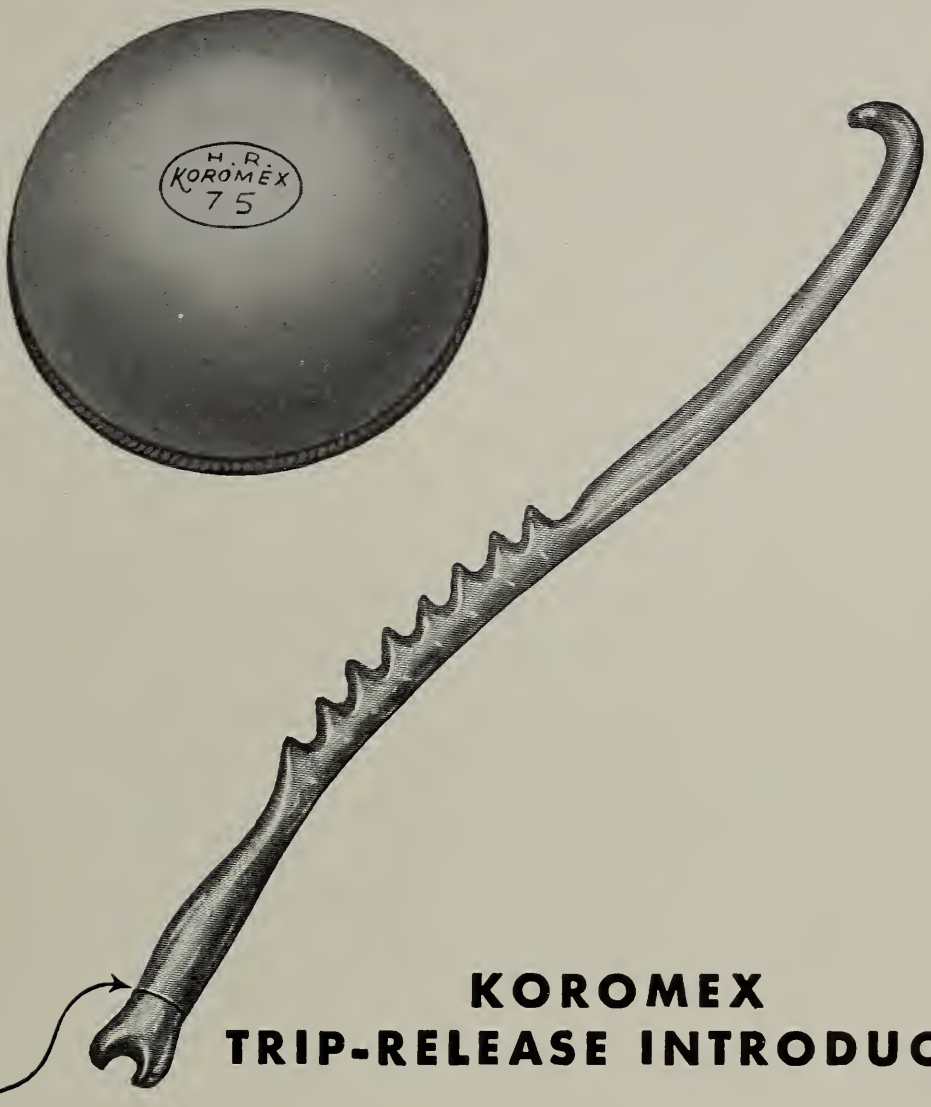
Athol B. Thompson, Grand Rapids; Marcus B. Tidey, Grand Rapids; Don W. Thorup, Benton Harbor; Franklin H. Top, Detroit; Wm. R. Torgerson, Grand Rapids.

C. F. Vale, Detroit; Harvard J. VanBelois, Grand Rapids; R. S. VanBree, Grand Rapids; V. Vandeventer, Ishpeming; Harold E. Veldman, Grand Rapids.

M. O. Wade, Coldwater; J. J. Walch, Escanaba; R. V. Walker, Detroit; Arch Walls, Detroit; A. V. Wenger, Grand Rapids; John A. Wessinger, Ann Arbor; D. Bruce Wiley, Utica; E. B. Witwer, Detroit; Merle Wood, Hart; Arthur R. Woodburne, Grand Rapids.
Gordon Yeo, Big Rapids; W. R. Young, Lawton.

The list of those attending on Wednesday, Thursday and Friday will appear in subsequent issues of THE JOURNAL.

## KOROMEX DIAPHRAGM

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## COUNTY MEDICAL SOCIETY MEETIINGS

*Bay-Arenac-Iosco*—Wednesday, October 22, 1941—Bay City—Subject: "Shock Therapy for the Mentally Sick."
Wednesday, November 12, 1941—Bay City—Speaker: H. C. Fields, M.D., Ann Arbor—Subject: "Vitamins."

*Berrien*—Thursday, November 13, 1941—Benton Harbor—Speaker: Chauncey C. Maher, M.D., Chicago—Subject: "Acute and Chronic Nephritis."

*Calhoun*—Tuesday, November 4, 1941—Battle Creek—Speaker: Robert Bruce Malcolm, M.D., Chicago—Subject: "Tumors of the Large Bowel."

*Dickinson-Iron*—Thursday, November 6, 1941—Iron Mountain—Speaker: John Claridge, M.D., Chicago.

*Hillsdale*—Tuesday, November 4, 1941—Hillsdale—Speakers: M. R. Kinde, M.D., Battle Creek and J. P. Gray, M.D., Hillsdale.

*Ingham*—Tuesday, October 21, 1941—Lansing—Speaker: Charles F. McKhann, M.D., Ann Arbor—Subject: "Convulsions in Infancy and Childhood."
Tuesday, November 18, 1941—Lansing—Speakers: R. H. Denham, M.D., Grand Rapids—Subject: "Infections of the Hand."

*Ionia-Montcalm*—Tuesday, November 11, 1941—Grand Rapids—Met with the other Societies of the Fifth Councilor District.

*Oakland*—Wednesday, October 1, 1941—Rotunda Inn—Speaker: Prof. N. B. Lewis, Ann Arbor—Subject: "What About Vitamins?"

*St. Clair*—Tuesday, October 28, 1941—Port Huron—Speaker: Grover C. Penberthy, M.D., Detroit—Subject: "Treatment of Appendicitis."
Tuesday, November 11, 1941—Port Huron—Speaker: S. W. Insley, M.D., Detroit—Subject: "Office Practice of Allergy by the General Practitioner."

*Washtenaw*—Tuesday, November 11, 1941—Ann Arbor—14th District Meeting.

*Wayne*—Monday, December 1, 1941—Detroit—General Meeting. "Certain Problems Associated with the Treatment of Goiter" by George Crile, Jr., M.D., Cleveland.
Monday, December 8, 1941—Detroit—Medical Meeting—"The Use and Abuse of Barbiturates"—Speaker: Wm. D. McNally, M.D., Chicago.
Monday, December 15, 1941—Detroit—General Practice Meeting—Joint session with the Detroit Pediatric Society.

*West Side (Wayne)*—Wednesday, November 26, 1941—Ninth Annual Clinic—Speakers: H. Balberor, M.D., H. J. Walder, M.D., S. D. Jacobson, M.D., C. J. Smyth, M.D., H. N. Horan, M.D., M. K. Newman, M.D., D. C. Somers, M.D., F. A. Weiser, M.D., G. B. Myers, M.D., F. Margolis, M.D., and Muir Clapper, M.D. The Clinic was conducted by S. E. Gould, M.D., at Seymour Hospital, Eloise.

* * *

## COUNCIL AND COMMITTEE MEETINGS

1. Wednesday, November 12, 1941—Industrial Health Committee—Olds Hotel, Lansing—6:30 p.m.
2. Thursday, November 13, 1941—Executive Committee of The Council—Olds Hotel, Lansing—12:00 noon.
3. Monday, November 17, 1941—Prelicensure Medical Education Committee—Olds Hotel, Lansing—6:30 p.m.
4. Sunday, November 30, 1941—Committee on Scientific Work—Olds Hotel, Lansing—3 p.m.

## NEW COUNTY SOCIETY OFFICERS

### Clinton

W. B. McWilliams, M.D., Maple Rapids, President.
Arthur C. Henthorn, M.D., St. Johns, Vice President.
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D. W. Hart, M.D., St. Johns, Alternate Delegate.

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John S. Wyman, M.D., Flint, Secretary.
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A. Dale Kirk, M.D., Flint, Alternate Delegate.
T. S. Conover, M.D., Flint, Alternate Delegate.
Frank Johnson, M.D., Flint, Alternate.
Mrs. Sara M. Burgess, Flint, Executive Secretary.

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## HALF A CENTURY AGO

*(Continued from Page 952)*

crasies that enter into the methods of living, general construction, build of the system, etc.

Dr. Alvord: I think the doctor's remarks have a good deal of force, in that the tendency of the times is to attribute everything to this disease. I would like to have the doctor feel that we fellows who are out in the fields practicing medicine, are oftentimes quite as particular as college men are in differentiating cases. The fact is, I do not know much about this disease, and I wanted to stir up the learned men as much as possible, to obtain all they know for the benefit of the Section, but I do not believe they have arrived at any more conclusions than I have. I was only trying to feel their pulse on the subject.

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Issued Monthly Under the Direction of the Council
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# Marriage After Forty*

By Harrison S. Collisi, M.D., F.A.C.S.

Grand Rapids, Michigan

Harrison Smith Collisi, M.D.

*M.D., University of Michigan, 1912. Chief of Division of Obstetrics and Gynecology, Butterworth Hospital; Courtesy Staff, Obstetrics and Gynecology, Blodgett Memorial Hospital; Special Visiting Staff, Obstetrics and Gynecology, St. Mary's Hospital; Fellow, American College of Surgeons; Diplomate, American Board of Obstetrics and Gynecology; Member, Michigan Society of Obstetricians and Gynecologists (Detroit); Member, Michigan State Medical Society.*

■ Man, in primitive life, chose a mate because of his instinctive urge to reproduce his kind. Love did not become an important factor in his life until civilization had developed his understanding of law and order, and had taught him that his innate right to possess a woman was based upon moral, religious and sociological principles that exist today as the most adamant of our whole fundamental structure.

As civilization advanced divorce and remarriage became known. Statistics show that successful marriages are those that go beyond the age of forty. But after forty is the time when the most serious crashes in matrimonial life occur. By this time children have been brought into the world, the family has grown, the economic foundation has been established and the physical attraction between man and wife has reached its zenith. A break in marriage at this time would be a most serious incident in the life cycle of the married couple.

Most of us look at marriage through a misty haze of poetical and romantic language. We expect it to be the fulfillment of desire, joy, love and life. The foundation of happiness and of health is made in the first months of marriage, and the years that follow are colored by those early days—most momentous to the man and highly fascinating to the woman. When toleration supplants coöperation love dies and marriage is little more than misapprehension, disillusionment and alienation.

There is a time in the lives of most married people when a domestic disagreement may occur. It may be only a trivial tiff which readily corrects itself, or it may take on serious proportions which threaten to disrupt what has heretofore been a happy union. Several factors are concerned—moral, economic, jealousy, outside interference, sexual maladjustment, and a variety of other causes.

The duration of marriage and the presence of children are important considerations in marital conflicts. In marriages of short duration a large percentage of disagreements arise from failure of the partners to understand each other. The marriage is not old enough for each to have become thoroughly acquainted with the other.

After forty, when married couples are expected to have mature marital judgment another factor comes into their lives. At this time Mother Nature begins to play a trick on man and woman. An era is entered when certain physical and emotional changes take place. The success and happiness of married people after forty depend chiefly upon an intimate knowledge and an understanding of these changes.

So insidiously does this change creep upon the man that the woman may not recognize it and therefore fails to understand his changing nature. In the case of the wife the signs of the change are more abrupt and noticeable, although the degree in which they occur may vary.

In order to understand more thoroughly the changing natures of man and woman after forty,

*Delivered at the annual meeting of the Woman's Auxiliary to the M.S.M.S., Detroit, Michigan, September 21, 1938.

we should know something of their normal natures in earlier life.

### Nature of Man

Ages ago, man lived in trees, caves and as a nomad following his flocks. Today he has developed new physical structures, new ways of living and emotional responses that are representative of the cumulative experiences of mankind. But it is only in the last half century that he has seriously begun the study of his emotional life.

**Man's instinct of reproduction, of which all normal men are aware, is foremost in his life. Quite often, it exists independent of love with its associated feelings of sympathy, understanding, and companionship. These instincts and feelings, in a normal healthy man, may not be centered on the same woman. A man may love a woman and not be physically attracted to her; or he may have a strong physical attraction to another woman whom he does not love.**

**A marriage in which the man does not have love and strong physical attraction toward his wife is usually unsuccessful. If he does not have this attraction before he marries her, he is not likely to acquire it afterward and such a marriage is almost certain to be a failure. This instinct in man is natural and women should realize the importance of treating its first manifestations with broad understanding.**

The sex coefficient varies in man. Naturally, he is agressive, impatient, quickly aroused and at times misunderstanding and inconsiderate in his sexual demands. He may lack control of his sexual urges, be unreasonable, and his sexual ethics may even be crude and repulsive.

### Nature of Woman

Before the dawn of civilization, woman had no other purpose on this earth except to be the mate of man and to bear his offspring. Because of the long period of gestation and dependence of the child upon its mother, woman was incapacitated and needed protection of man if she and her young were to survive. As a result of her dependence on man, she fell under his domination to such an extent that her primary sexual impulses were obscured. But when social behavior became known, her life was controlled by manners, morals and customs. She contended for release from male domination and after centuries, man conceded to her demands.

Accepting the scriptural span of life as three score and ten years, a woman's life may be divided into three distinct periods: the period of immaturity, or the "Age of Innocence"; the period of sexual activity, which is biologically the most important but not often the happiest portion of a woman's existence; and the period of menopausal life, when the organs of reproduction cease their activity and the ability to bear children comes to an end.

In the period of sexual activity, woman's sexual needs and responses are not identical with man's. Mating comes to her as a response to a general harmonious feeling of well-being, rather than as a result of a specific erotic stimulation. Man cannot expect to find in the normal woman the same frequent, intense urge that he experiences. Since monogamy is the standard set by our social structure, he must recognize sexual differences. He must learn that her sex life is a more diffuse part of her nature. Sexual desire in woman is largely mental and to a great extent stirred by the feeling of love for her husband.

### Man and Woman During the Climacterium

We hear much of the "Dangerous Forties," the period of change in the lives of man and woman, or what is termed scientifically the climacterium. That such a period exists in the life of woman has long been known, but Maranon was the first to point out the evidence of a male climacterium, the symptoms of which closely parallel the non-menstrual manifestations in woman.

The climacterium has a different effect upon each physically, but in both there is a state of mental unrest, emotionalism, tendency to gloominess, apprehensiveness, irritability, and even insanity. Suicide is not infrequent, particularly in males. There is a change of sex inclinations usually shown by a decline in sex activity, and it may be lacking entirely. In some cases it becomes excessive and leads to social complications.

In women, seventy-five per cent suffer from distressing symptoms during the climacterium. In addition to the abrupt cessation of menstruation certain nervous disturbances occur. The most frequent of these consist of irritable temper, excitability, hysteria, fatigue, insomnia, depres-

sion and crying, fear and anxiety, forgetfulness and loss of memory. The mental state should be carefully observed, as melancholia and other forms of insanity may develop at this period in woman with a hereditary taint or neurotic tendency. Other symptoms such as flushes and chills, palpitation and rapid heart, difficult respiration, neuralgia in various parts of the body, burning sensations, headaches, and frigidity may also be present. Occasionally, the sexual appetite increases and some women with little previous desire suddenly develop a passionate nature, but usually sexual reserve is an outstanding feature.

In man, the appearance and symptoms of the change come gradually and insidiously. There is nervous imbalance, his judgment may be affected and he is easily led from the straight and narrow path of discretion. His whole endocrine system is affected. He has inherited the nature of his cave-man ancestors and may fail to understand the trick that Nature is playing. Sometimes he regards his decline in sexual function as cause for a shift in his sexual attentions, so he lets himself be attracted to other fields of indulgence—drinking, gambling, women. At once he arouses the ire of his mate, quarrels ensue, and usually the final result is—mutiny in the home.

A wife usually re-acts to her husband's "change of life" by becoming suspicious of him, loses confidence in him, is antagonistic and misunderstanding. She does not understand his sudden loss of interest in her and is surprised that she is neglected when her sexual proclivities are no longer luring to her mate as they were in earlier life. She may become jealous and accuse him of infidelity. Quite often a wife berates her husband publicly and privately. She believes she has married a man of her own nature and does not realize that he is physically and emotionally different. Some women are keenly analytical of man's genetic behavior and know more about their husbands and sons than they do about their daughters and themselves. They are usually interested in such subjects as sane sex living, sex ethics, sex freedom, birth control and maternal health, and seek enlightenment by reading, attending lectures and consulting the family physician.

On the other hand a man may become suspicious of those with whom he is working. He feels that others are holding him down and are getting the better of him. He may even picture the woman with whom he lives as a mere object for his sexual gratification and have no love for her. This situation may terminate ultimately, and usually does, in domestic disaster.

### Woman After Forty

The menopause connects two eventful periods in a woman's life, the span of childbearing and the later years of greatest intellectual vigor. The gloomy picture of "change of life" painted by the laity is thoroughly unjustified. It has been said that from fifteen to forty are a woman's richest years—years of vitality, courage, accomplishment, emotion, charm. Yet there is a time in her life after forty at which she may be endowed with frank happiness and a healthy vigor of mind and body heretofore unsurpassed. For many women of the upper social classes, life really begins at forty. At that time they undergo a temperamental renaissance. Doctor Graves, the eminent gynecologist, aptly puts it: "Relieved of the anxieties of childbearing and the annoyances of menstrual function, and reconciled to the cosmetic alterations of old age, they acquire a mental and physical vitality never before experienced, and enjoy for a decade or two the best years of their life."

Some women past the climacterium, especially those who have never borne children and those of the maiden class, may acquire an attractiveness that they never before possessed.

Intellectual attainments may become prominent. Often, a woman enters a new and calm enjoyment of intellectual occupations, becomes an important factor in society and finds more time for her family and home. To offset her decline in sex life, she turns to writing, art, politics, and many other worth-while endeavors. History tells us that many women have become nationally famous in various fields. Examples of such women may be called to memory and are observed every day in civic life.

The woman whose life has been spent in mere pleasure-seeking, who has neglected the cultivation of mind and heart, and who knows nothing of the peace and poise found in the comforting assurance of a Christian faith, finds life wearisome and lonely. When she discovers that she no longer attracts the opposite

**sex and is unable to acquire new interests, she becomes bitter, repressed, misunderstood, and drifts on into an unhappy, retrospective old age.**

Upon the mental horizon of every woman, as she approaches the forties, there looms this pending crisis through which she must inevitably pass. In the minds of many, tradition has instilled a fear that when the change supervenes the bloom of life will fade and the burdens of age will be assumed. She may sadly refer to her more youthful attractions, in the words, "When I was a woman." But when a woman reaches maturity she should not be impressed with the notion that her life is limited by her reproductive activity and by her reciprocal relations with the opposite sex, and that after the cessation of this function there will remain little of interest for her during the remainder of her mundane existence other than to train her daughters to occupy a similar field of procreation activity. A broader and truer view is that life is a school in the vestibule of eternity leading to larger spheres of activity, responsibility and enjoyment, and each age is important and brings its own opportunities for spiritual development and achievement.

The woman after forty should realize that her life is a treasury filled with the wealth of experience that she has accumulated from childhood to maturity. Childhood, the age of acquisitiveness, discipline and untainted joys; early maturity, with its happy relationships and fascinating revelations of conjugal life; home, husband, children—each have contributed a most valuable share. And now, maturity, merging invisibly as it does, into old age and the more abundant, untrammeled life beyond, places the crown of experience and authority upon her worthy head. Many of our noblest citizens, most devoted to the common welfare, are women at this period of life. They are living in a period of rejuvenescence—"The gauge of their age is not years, but vital force."

Until a few years ago the medical profession had little to offer the woman suffering from the menopausal syndrome. Treatment consisted chiefly of sedatives and psychotherapy, but today the progress of scientific medicine has made it possible to relieve the troublesome symptoms of the climacterium and to do much to make a woman's life enjoyable to her. The woman who is unable to adjust herself to the conditions of life under which she is living frequently asks herself the question, "Why was I born a woman?" and then often finds escape from her emotional difficulties in illness.

The profound economic and social changes that have occurred in the lives of most American women and those of other civilized countries during the last fifty years have directed new interest to the health problems which concern women particularly. The economic independence of woman plays an important part in her health. In order to keep herself physically fit so that she may compete with man in the world today, a woman should pay particular attention to her physical and mental health. The responsibility for domestic management involves a much greater output of physical energy than that to which a woman has been accustomed.

One is led to believe that the health of a married woman is more precarious than that of her unmarried sister, but it appears that the reverse is actually the case. The biologic norm is more closely fulfilled by marriage which increases the mental and bodily well-being of a woman, provided the simple rules of health are followed. Goodwin in the "Health of the Married Woman" states that when a woman marries there are four main directions in which her life is altered:

1. Responsibility for domestic management.
2. Companionate life.
3. Sex life.
4. Reproductive life.

**The problem of companionate existence for a woman who marries is likely to be more difficult than for a man. This is largely because most men have always been to some extent dependent on female supervision, while a woman generally develops a philosophy of independence to the opposite sex.**

**Upon the gynecologist today rests the difficult task of guiding a woman through this most trying period of her life to the end that she may safely reach the quiet waters and serene environment of a happy mature age. "This channel is beset with treacherous rocks and shoals upon which the ship of health of woman may only too readily be wrecked or stranded."**

### Conclusion

Success and happiness in married life depend chiefly upon a *well-balanced mutual relation* of husband and wife. After forty this should include an intimate understanding of the changes taking place in their natures. Both must realize that married life cannot go on indefinitely on a diet of romance, but that good comradeship and mutual respect must exist and thrive continuously. There must be mutual respect for each other's personality, good sense and judgment, entire confidence and frankness when problems arise and responsibilities present themselves. Happiness, contentment, and life abundant will be the result.

The family of today should control its social behavior by a *code of irreproachable manners, morals and customs.* It should be a one-wife, one-husband family for man is no more polygamous than woman is polyandrous. Polygamy and polyandry are innovations in human society as are infanticide, prostitution, celibacy, homosexuality, autoeroticism, and other sex psychoses, which are "as barren as vestal virgins and biologically as useless."

*Modernistic marriage* has come into existence during the last few years. Our experience with it is too inadequate to really accept it as a part of our present social structure. It may be likened to a mirage—a vision of sensuous splendor which appeals at first but soon fades into an unsuccessful experiment.

The increase of number of divorces and broken homes in the United States makes another phase of *marriage education imperative.* There is a tendency at the present time to place too much importance on the physical side of marriage. It is important, but not all important. Each party to a marriage should understand that love, good old fashioned love, not just a passing whim, must exist.

"Life is not a stagnant pool, it is a flowing river carrying the human race to higher standards, to newer and better things, to more complete understanding of our environment and to marvelous revelations of the potentialities within ourselves."

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# Sulfathiazole in Exfoliative Dermatitis

By Henry K. Baker, M.D.

Flint, Michigan

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■ The purpose of this paper is to record another[8] case of recovery in massive exfoliative dermatitis treated with sulfapyridine, and, particularly, to suggest that massive wet exfoliative dermatitis, or "epidermolysis," is a symptom of a severe toxic or septic state, and that what have been previously felt to be clinical entities, namely neonatal pemphigus and Ritter's disease, may occur at ages other than neonatal infancy, and may possibly not be entities at all but merely types of reaction to a septicemia, bacteremia, or localized staphylococcic infection.

Ritter von Rittershain, in 1870, first described an acute disease of the first month (usually first week) of life, associated with massive epidermolysis, septic course and usually fatal outcome. He reported some 297 cases in ten years. Since then fewer and scantier reports are found and, although Ritter himself believed this disease a pyogenic infection, the literature is confused regarding the cause and also regarding its relationship to pemphigus neonatorum, which, in children at least, is generally agreed to be a staphylococcus skin infection.

Hart[5] described two institutional epidemics of pemphigus neonatorum and Daveo[2] one, in which the skin manifestations and the clinical courses varied from mild illness with a few discrete bullæ to massive exfoliative dermatitis with septic course and termination indistinguishable from Ritter's disease. Daveo states that he feels that Ritter's disease is merely a fulminating and more massive type of pemphigus neonatorum.

The pathology of Ritter's (Cailliau,[1] Kendall[6]) is not different from that found in fatal pemphigus cases, only the rapidity of the clinical course and extent of dermolysis seem to vary.

While Raschkes[7] reports a case of an infant born with established Ritter's disease, most cases, as for pemphigus neonatorum, start in the first week and recover or die in the second or third,

though one of Ritter's own cases occurred in the seventh month of life.

It is because of this reported neonatal incidence that we offer the present case with some hesitation and explanation.

## Case Report

The patient, L. A. B., was a white male, aged fifteen months, weight 22 pounds. Normal at birth and of 7 pounds weight, he was the fourth male offspring. The family history was normal except that an older sibling had died of erysipelas before the birth of the patient.

This patient was well until February 5, 1941, when he broke out with measles, acquired from an older brother. He was up and about again by February 15 and seemed recovered when on February 18 he appeared irritable, refused supper and went to bed early. At 2:00 A.M. he was found in severe convulsion, with high fever, followed by drowsiness and very rapid pulse but negative neurological findings. At 4:00 A.M. the convulsion was repeated, the fever 104, the pulse 160 and the respirations 40. At 7:00 A.M. the convulsion was repeated again and the patient was taken to Hurley Hospital. At 9:00 A.M. the skin was carefully examined for petechiæ as possible evidence of epidemic meningitis, and none were found. At 9:30 A.M. a spinal puncture was done and the skin stood a vigorous preparation with 7 per cent iodine followed by alcohol. The spinal fluid, under 20 mm. mercury pressure, showed three lymphocytes, negative Pandy, negative serology and a flat gold curve. During the day a blood count and blood culture were made. The child took fluids, was irritable when aroused but in general quite stuporous with occasional carpo-pedal twitchings. The temperature varied from 101 to 103. The pulse varied from 160 to uncountable and the respirations from 60 to 80 a minute although the breathing was easy and the chest clear. When the patient was seen at 5:00 P.M. the same evening a few blebs at the corners of the mouth and some on the forehead were noted, and the nurse stated she had first noted these at about 3:00 P.M. These were typical inflammatory bullæ, but on further examination, loose patches of wet skin which peeled away in sheets leaving red, raw oozing surfaces were discovered on the chest, back, buttocks and glove and stocking areas of the hands and feet. I have emphasized the time relationships here to show how quickly and completely the skin lesions developed. The denuded areas, which denuded upon slightest trauma, looked exactly like second degree burns when the skin came off. With the diagnosis of pemphigus neonatorum in mind sulfapyridine therapy was started, but the dermolysis here seen is not to be confused with the chronic slowly spreading bullous lesion described in textbooks as pemphigus. Tannic acid 5 per cent in a water-base jelly (a proprietary form) was used for the desquamating areas, exactly as for burns, and all areas subsequently healed exactly as for noninfected burned surfaces. The blood count showed 45,000 w.b.c. on admission and this rose, with the fever, to 60,000 w.b.c. in the first eighteen hours of treatment, and then fell steadily (as did the fever) as the patient improved during the next eight to ten days. After eighteen hours of sulfapyridine therapy the temperature began its fall, the new areas of desquamation were reduced and at twenty-four hours, the child had changed from a drowsy moribund pallorous infant to an ill, fretful, active child of good color. At forty-eight hours the sulfapyridine was stopped because of diarrhea, marked abdominal distension and vomiting. In eight hours sulfathiazole was started and continued for the next eight days and the child progressed steadily to recovery.

The admission blood culture showed hemolytic Staphylococcus aureus, and the same organism was again recovered on the third day, many colonies being obtained from only two cubic centimeters of blood. The hemoglobin showed a rapid decline after three days and three small transfusions were given.

The medication consisted of 68 grains of sulfapyridine in the first fifty-two hours of therapy, or a total of 1.5 grains per pound per day. In the next eight days the dose averaged 19 grains a day, or not quite one grain per pound per day. All drugs were stopped on the tenth day when the temperature had been normal for forty-eight hours. Recovery continued and has been complete to date.

## Discussion

One case warrants very little discussion, but from the experiences of others, as reviewed in the literature, and a consideration of this case, I feel that epidermolysis is probably a symptom and not a disease. It is probably a symptom of a severe septicemia, usually due to staphylococcus aureus, or of a severe toxemia related to a staphylococcus infection, and that Ritter's disease, like severe pemphigus neonatorum is probably an infant or neonatal form of staphlococcic septicemia which may occur at later times in childhood. Ritter's disease is rarely reported now. No one has ever matched his 297 cases, which suggests that its present rarity and the increasing rarity since his day, as well as the increasing rarity of pemphigus, is related to improved general infant hygiene. I agree with Ryan[8] that the new sulfonamide compounds offer a great new hope in this disease and that if further cases like these are reported, the very fact that these drugs effect a cure is presumptive evidence of the nature of the causative agent. I point to the heavy doses of the drugs used and urge that further observers take blood cultures and report their cases. I feel that the bullæ or the extensive epidermolysis are toxic

phenomena and not due to infection primarily although staphylococci are found in some blebs and may be cultured from the oozing surfaces.


### Summary

A case of wet exfoliative dermatitis associated with hemolytic staphylococcus aureus septicemia in a child of fifteen months is reported. It is suggested that epidermolysis may be a symptom of septicemia and that the two children's diseases showing this phenomenon, namely Ritter's disease and pemphigus neonatorum, may be related staphylococcic septicemias. Chemotherapy now seems to be the treatment of choice.


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### IS THE DANGER PAST?

On September 24, Mr. Charles A. Togut, speaking before the National Fraternal Congress of America, warned that state or governmental medicine will paralyze the country's fifty million voters and destroy the private practice of medicine. He said:

"National Defense has catapaulted the issue of the 'Nation's Health' onto the front page of every newspaper and onto the burning wires of every radio transmitter. As in nations ruled by the sword, malicious propagandists are piercing the heart of our incomparable system of medical care.

"The Congress of the United States is weighing the destiny of our peoples and of our doctors with numerous authoritarian legislative medical measures. The battle of the century, the government versus the American Medical Association, is but a prelude to the conditioning processes of a National Planned Medical Care Program, unless the American peoples, the doctors, the industrialists, the leaders of labor and capital can smother the most powerful propaganda factory in the world and inaugurate fighting means and methods to unite the leaders of medicine and industry in a progressive Health Insurance Movement."

Today there is greater cause for fear and a greater need for constant and intelligent vigilance than at any previous time if the independence of medicine is to be preserved.—National Physicians Committee.

# Movement for the Registration of Vital Statistics


By Earl E. Kleinschmidt, M.D., Dr.P.H.

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Efficient registration of births, marriages, and deaths has so many points of moral, legal, and commercial interest, that we might expect more earnest calls upon the law makers from other sources. But experience proves that none realize its importance so much as the medical statistician, and on us devolves the duty of pressing its claims.

J. H. Beech, M.D., Coldwater, 1857.[1]

■ Prior to 1850 the only available statistics of Michigan consisted of census returns made in 1840 by the federal government.[2] This was the first census of Michigan as a state. It was recorded at that time as having 212,267 inhabitants.[3] In 1850, this number had increased to 397,654, a gain of 185,387 persons; in 1860 the State had 749,113 inhabitants; and by 1870 it had increased to 1,184,059 people;[4] making it the thirteenth state[5] in point of population.

In 1856, a law was enacted which required the registration of marriages, but it was carelessly observed. "So little attention has been paid to it," said Dr. N. B. Stebbins of Detroit, "that the records in the clerk's office in the county of Wayne—the most populous county in the State—show, as we are informed, that only 419 marriages were recorded in that office for the year 1856."[6] The law had many imperfect features, and accordingly those entrusted with the duty of carrying out its provisions, though subject to heavy penalty for neglect, wilfully ignored its provisions. One reason perhaps that accounted for this state of affairs was the fact that no annual report was required of the registrars.[7]

[1]Pen. Jour. Med., 4:535, (April) 1857.
[2]Jour. House of Rep. State of Michigan, 1:11, 1872.
[3]Loc. cit.
[4]Loc. cit.
[5]Loc. cit.
[6]Ibid., 3:613, 1857; An. Rep. M.S.M.S., 1:91, 1859.
[7]An. Rep. M.S.M.S., 1:84, 1859.

### Efforts of State Medical Society to Secure Registration Law

As is indicated by the quotation found at the beginning of this article, the medical profession had a deep interest in the proper registration of vital statistics in the state. This interest manifested itself soon after the State Medical Society was organized in 1853. The physicians most responsible for initiating the movement for the establishment of a registration law in the state were the following: Dr. J. H. Beech of Coldwater, Dr. N. B. Stebbins of Detroit, Dr. J. Adams Allen of Kalamazoo, Dr. George B. Wilson of Port Huron, Dr. J. J. Noyes of Detroit, Dr. J. H. Jerome of Saginaw City, and Dr. Zina Pitcher of Detroit.

Perhaps the most important influence which served to stimulate Michigan physicians to take steps in this direction were the activities of the American Medical Association. In 1853, Dr. B. R. Welford of Virginia, in his presidential address, urged the enactment of laws in various states for the securing of a uniform system of registration of births, marriages, and deaths.[8] During this same meeting a committee was appointed of which Dr. N. B. Stebbins of Detroit was a member.[9] This committee "On Registration of Marriages, Births, and Deaths" subsequently made an extensive report at the ninth annual meeting of the Association at Detroit in 1856. The summary of this report was as follows:

1. The Secretary, or some other officer of State, shall prepare and circulate to the towns, cities, or counties as the case may be, blank forms, for returns, based upon the system and nosological arrangement adopted in the preparation of the mortality statistics of the last census of the United States. (It has been suggested that mumps be added to the list of diseases.)
2. The birth of every child shall be recorded by the parent or owner of the child, stating distinctly the time of its birth, the name and nativity of both its parents, and whether it be the first, second or any other number, by the same parents.
3. Every marriage shall be recorded by the person who solemnizes the marriage contract, stating the names and nativity of both parties.
4. Every death shall be recorded by the person having charge of the premises on which the death shall have occurred, and the record shall distinctly set forth the cause of the death, according to the certificate of the physician having had charge of the patient, or according to the best of his information which can be obtained, together with the name, activity, age, sex, color, and occupation of the deceased; and these several records shall be given to the clerk of the town, city, or county, as the case may be, and he shall make a return of them, according to the blank forms which he shall have received, to the Secretary or other officer of State who shall annually publish the same.[10]

In 1858, at a similar meeting held at Washington, D. C., by the American Medical Association, Dr. George Mendenhall of Ohio, Chairman of the Committee on Medical Topography and Epidemic Diseases of Ohio, Indiana, and Michigan, recommended to the assembly that Congress be petitioned to pass a law by which a uniform system of registration might be adopted by all states for the purpose of obtaining correct vital statistics by those whose duty it would be to take the census of 1860.[11]

Steps being taken by other states also influenced Michigan physicians to work for a law of this kind. A pioneer in many ways, Massachusetts was the first state to collect vital statistics in this country.[12] It had passed a law for the collection of statistics of births, marriages, and deaths as early as 1842.[13] The first annual report was made February 7, 1843.[14] The priority of this achievement is apparently disputable, for according to available records, Dr. B. R. Welford of Virginia, on the occasion of the sixth annual meeting of the American Medical Association at New York, reminded his listeners that his state had set the example for other states by the enactment of a law for the registration of marriages, births, and deaths.[15] New York passed such a law in 1847, making its first annual report in April, 1848.[16] Ohio passed a similar law in 1856.[17] By 1859, Rhode Island, Connecticut, New Jersey, Kentucky, Vermont, and South Carolina had passed laws for the registration of births, marriages and deaths.[18]

According to available accounts, the provisions of these laws already enacted in other states were

[8]Pen. Jour. Med., 1:43, 1853.
[9]Ibid., 3:24, 1855.
[10]An. Rep. M.S.M.S., op. cit., p. 89.
[11]Pen. and Ind. Med. Jour., 1:667, 1859.
[12]Jour. H. of Rep. State of Mich., 2:1149, 1867.
[13]An. Rep. S.B.H., 9:108.
[14]Jour. H. of Rep. State of Mich., op. cit.
[15]Pen. Jour. Med., 1:43, 1853.
[16]Jour. H. of Rep. State of Mich., op. cit.; The New York system of registration of births and deaths was originated by Dr. Thomas C. Brinsmade of Troy, N. Y. who for 20 years kept a tabulated view of his practice. (An. Rep. M.S.M.S., op. cit., p. 79.)
[17]Pen. and Ind. Med. Jour., 1:667, 1859.
[18]An. Rep. M.S.M.S., op. cit., p. 83.

carefully scrutinized by physicians in Michigan. In his report as Chairman of the Committee on Vital Statistics of the State Medical Society in 1859, Dr. George B. Wilson of Port Huron praised the method of registration being carried out in New York State, and urged that a similar method be adopted by the Legislature of Michigan.[19] Apparently the registration law of Ohio failed to function properly at the start, for Dr. George Mendenhall, Chairman of the Committee on Medical Topography and Epidemic Diseases in Ohio, reported in 1858 at the meeting of the American Medical Association in Washington, D. C., that he was unable to secure any data on births, deaths, and marriages because of "culpable inattention on the part of those whose duty it was to furnish blanks and collect information for these statistics."[20]

Cognizant of the trend of events elsewhere, particularly as revealed in the several reports made at meetings of the American Medical Association,[21] several Michigan physicians took steps to interest others in the subject at meetings of district and state societies. At a meeting of the State Medical Society on March 26, 1856, Dr. J. H. Beech of Coldwater read a paper on "Observations of Diseases at Coldwater, Michigan in 1855." In this report he presented a record of mortality according to age.[22] At this same meeting, Dr. Zina Pitcher of Detroit called attention to some Registration Reports of the State of Rhode Island for the years 1853 and 1854, which on motion were referred to Dr. N. B. Stebbins for further study.[23]

**"The publication of the statistics which would be collected by a well-matured and rigidly enforced registry law," said Dr. Stebbins the following year at a similar meeting held at Lansing, "would serve as an annual lesson on the laws of human life in their operation upon ourselves, a kind of practical physiology taught in all our towns and at every fireside, far more instructive and impressive than any derived from books teaching the principles and laws of life developed by our national constitution, as actually existing under surrounding influences, and pointing to the means for their improvement and modification." And he further asserted, "Statistics of mortality, showing the extent and causes of death in different localities have been demonstrated by the experience of those States and countries where such a law exists, as of the first importance in many respects. In determining whether death in certain cases results from natural causes or otherwise, whether by disease or violence, murder, or accident, it has been frequently found of the greatest moment in the trial of important causes in the courts. Much information would also be elicited as the influence of occupation upon health, in regard to hereditary taint, and it would do much too, to awaken the public to the necessity of preventing the introduction of pestilential diseases. Not the least of these is the facility it would afford in collecting statistics of population, in ascertaining the relative number of births to deaths, and of males to females." "It is to remedy the defects of the law," he said, "so as hereafter to compel a more general compliance with it, and to couple with it a provision also requiring a careful and faithful registry of all the births and marriages in the State, that the action of the Legislature is now required."[24]**

The meeting of the State Medical Society the following year saw many things transpire which were to further intensify interest in the problem so ably discussed by Dr. Stebbins. Of utmost significance were the remarks of Dr. J. Adams Allen, President of the Society. "The profession should combine to secure periodical and complete reports of the three principal epochs in every person's history," said Dr. Allen, "viz., birth, marriage, and death. Without this clue there can be no rational comparison of the relative salubrity of different districts of the country, nor any accurate data upon which to found one of the most important problems of political economy; namely, given a certain population in a particular district, how long before it will be doubled or reduced to a moiety?—a question involving the very highest interests of the commonwealth. A registration of births and deaths combined with periodical reports from the vari-

[19]Ibid., p. 78.
[20]Pen. and Ind. Med. Jour., 1:667, 1859.
[21]At several meetings of the American Medical Association in the period 1847-1858, recommendations were made to the different states to adopt a regular system of registration of births, marriages and deaths. (Pen. and Ind. Med. Jour., 1:176, 1858.)
[22]Pen. Jour. Med., 3:497, 1856.
[23]Ibid., p. 495.
[24]Ibid., 4:615, 1857.

ous entreports of immigration, would furnish a reliable constant census—I need not speak here of its advantages in a merely civil point of view, inheritances and the like, but considered only in a professional light—it would tend to the elucidation of a vast number of unexpected truths." Referring to the vast amount of propaganda being spread elsewhere relative to the supposed unhealthfulness of Michigan, he said, "This error a faithful registration would speedily dispel and the augmented population and wealth which would then throng upon us to improve our matchless resources, our soil of unsurpassable fertility, and inexhaustible store of mineral and forest riches, would quickly repay thousand fold the trivial expense involved."[25]

So impressed were the members of the Society with Dr. Allen's views that a committee was appointed in an endeavor to carry them out, and Dr. Allen was made chairman of this committee.[26]

During the same meeting, Dr. N. B. Stebbins of Detroit submitted a report on registration. Dr. Stockwell of Port Huron read a volunteer paper by Dr. Geo. B. Wilson, also of Port Huron, on the "Necessity and Proper Method of Obtaining Vital Statistics." This was enthusiastically received by the membership, and Dr. Wilson voted the thanks of the Society. In addition, Dr. J. H. Beech of Coldwater presented a paper embracing the vital statistics of Coldwater for 1858. Records of mortality, temperature, wind, clouds, and storms were exhibited by Dr. Beech.[27]

Efforts to lay the matter of a registration law before the legislature were made in 1857, and again in 1859. As chairman of the Committee on State Affairs in favor of a law for the Registration of Marriages, Births, and Deaths, Dr. N. B. Stebbins labored for the passage of such a bill in 1857, but owing to the shortness of the legislative session and the amount of business to be transacted, the bill was left untouched.[28] At the meeting of the State Medical Society in 1859, Dr. Stebbins recommended that a committee be appointed to report a resolution and petition in favor of a registration law to be enacted by the legislature during the current session.[29] Dr. Beech offered a resolution to the same effect as follows:

> Resolved, That this Society earnestly recommend to the Honorable the Senate and House of Representatives that they do, at the earliest practicable date, enact the necessary laws requiring and providing for the thorough registration of births, marriages, and deaths, occurring in this State.[30]

Shortly afterwards petitions were circulated among the physicians of the state by the Committee on Vital Statistics consisting of Drs. Geo. B. Wilson and Stockwell of Port Huron as follows:

> To the Honorable the Legislature of the State of Michigan:
>
> Your petitioners, the undersigned citizens of this State, respectfully pray your Honorable Body to pass a law requiring the registration of Births and Deaths occurring in this State, the registration to fully exhibit the name of parents, and place of birth. The registration of deaths to exhibit the name, age, sex, occupation, disease, and place of residence of the deceased. The value of such a registration in furnishing proper statistical tables to exhibit the general health of the State, and the ratio of deaths as compared with other portions of the country cannot fail to appear on the increased emigration to the State.[31]

This attempt to secure a registration law was frustrated by events associated with the impending war. Lack of medical publications during the next few years made further inquiry impossible.

### The Enactment of a Registration Law

With the close of the Civil War, physicians returned to civil life and their former pursuits. According to available accounts of medical activities for this period, one of the first subjects to engage their attention was the matter of a law to provide for proper registration of births, marriages, and deaths. Interest in this subject was apparently intensified by the lessons taught by the war.

At a meeting of organization of the State Medical Society on June 5, 1866, a committee on "Vital Statistics" was appointed to resurrect interest in a registration law.[32] On motion of Dr. J. H. Jerome of Saginaw City, this committee was to take immediate action. To the committee

[25] An. Rep. M.S.M.S., op. cit., p. 18.
[26] Ibid., p. 6; Pen. and Ind. Med. Jour., 1:702, 1859.
[27] Pen. and Ind. Med. Jour., 1:703, 1859.
[28] Pen. Jour. Med., 4:613, 1857.
[29] An. Rep. M.S.M.S., op. cit., p. 88.
[30] Pen. and Ind. Med. Jour., op. cit., p. 703; An. Rep. M.S.M.S., op. cit., p. 10.
[31] Ibid., p. 75.
[32] Trans. M.S.M.S., 1:20, 1867 and 1868.

were named Drs. Stewart and Noyes of Detroit, and Richardson of Niles.[33] Later in the meeting it reported that "No provision existed in the State for keeping such statistics."[34]

Apparently other events were to assist the State Medical Society in its efforts to secure a registration law for the state. Following the close of the war, many people claimed pensions and dues from the federal and state governments because of the death of relatives and other losses incurred in the war.[35] Government officials, however, were confronted with an imperfect record system which made the legal aspects of this work most difficult to carry out. Their attention was thus drawn to the necessity for a new law at a most critical time in the history of the state, but at a time that was certain to bring out the inadequacies of the system then in use.[36] J. J. Woodman, Chairman of the Committee on State Affairs of the House of Representatives commented as follows on one occasion in February, 1867, "The subject of a registration law for births, marriages, and deaths in this State, was brought before the Legislature for consideration at a former session and although the measure was not then enacted into a law, it has in the meantime lost none of its importance or usefulness. The only means in this State, at present," he said, "for obtaining information collected through an efficient registration law, are, (1) that collected through the State and United States census, which are taken only once in five years; and (2 that of our State law for the registration of marriage certificates by the county clerk."[37]

By 1867, States having registration laws included Massachusetts, New York, New Jersey, Connecticut, Vermont, Rhode Island, New Hampshire, Pennsylvania, Kentucky, and South Carolina.[38]

Efforts to secure a similar law in Michigan took shape early in 1867. Memorials were directed to the legislature from all parts of the state by physicians and other citizens, requesting the benefits of a system of registration of births, marriages, and deaths. Among the more important were the following: A memorial from the Northeastern Medical Society embracing the counties of Oakland, Lapeer, Macomb, St. Clair, and Sanilac. This read as follows:

> Resolved, That we, as a medical society, recognizing the importance and utility of a registration law in this State would most respectfully and urgently recommend to the Legislature, now in session at Lansing, Michigan, to pass a law providing for the registration of births, marriages, and deaths in this State.[39]

On January 16, 1867, the Hon. Seth K. Shetterly, representative from the second district of Macomb county, having given previous notice, and having been granted leave, introduced a bill to provide for the registration and return of births, marriages, and deaths to the House of Representatives.[40] This became known as House Bill No. 219, "A Bill to Provide for the Registration of Births, Marriages, and Deaths."[41] On receipt of the original bill prepared by the Hon. Shetterly and the sponsors of the bill, the Committee on State Affairs revised it, preparing a substitute which they sent back to the House of Representatives recommending that the substitute be passed: In the words of the Hon. J. H. Woodman— "thinking that a law more simple in its provisions, and less expensive in its operations would be more acceptable to the people of the State, your committee has prepared a substitute for the bill."[42] The Senate returned the bill with an amendment providing, "That no person shall be required to answer any question which will tend to criminate himself or herself, upon any such examination."[43] The changes thus incorporated into the original bill were later to make

[33]Det. Rev. Med. and Pharm., 1:191, 1866.
[34]Trans. M.S.M.S., op. cit., p. 23.
[35]An. Rep. Reg. of Births, etc., Secretary of State, 1:2, 1868.
[36]Loc. cit.
[37]Jour. H. of Rep. State of Mich., op. cit., p. 1149.
[38]Loc. cit.

[39]Det. Rev. Med. and Pharm., 2:204, 1867; also a memorial from Dr. N. B. Stebbins, in behalf of the Wayne County Medical Society; also the petition of Edward Cox, S. S. French, N. M. Campbell, E. G. Slater, W. G. Sanders, and James A. Dean, physicians of Battle Creek; D. D. Lamond and twenty-eight other citizens of Genesee county; J. H. Beech and fourteen other citizens of Branch county; E. Boyland and twenty-three other citizens of Wayne county; B. Aldrich and forty-two other citizens of Macomb county; D. A. Past, J. Tripp, Wm. G. Cox, and eight other citizens of Ypsilanti; W. R. Nims, and eight other citizens of Sanilac county; Earl Smith and twenty-four other citizens of Burlington, Calhoun county; H. B. Shank, M.D., G. E. Ranney, M.D., I. H. Bartholomew, M.D., H. B. Baker, M.D., W. C. Payne, W. Jones and Daniel L. Case, physicians and citizens of Lansing; Watson Loud and seven other physicians of Romeo, and vicinity; Samuel A. Babbitt, M.D., and six other citizens of Washington, Macomb county; O. E. Bell, M.D. and twelve other citizens of Oxford, Oakland county; Chas. Shepard and eighteen other citizens of Grand Rapids; A. P. Drake, M.D., and thirteen other citizens of Barry county; Wm. Brownell, M.D., and ten other physicians and citizens of Utica and vicinity; E. C. May and twenty-one other citizens of Livingston county; J. Paddock, M.D., and six other physicians of the city of Pontiac; M. C. Kenny, M.D., and twenty-one other citizens of Lapeer county; E. G. Berry, M.D., and seven other physicians of Branch county; and J. L. Valade, M.D., and eight other citizens of Monroe county. (Jour. H. of Rep. State of Michigan, 2:1148, 1867.)
[40]Ibid., 1:183, 1867.
[41]Ibid., 2:1548, 1867.
[42]Ibid., p. 1155.
[43]Ibid., p. 2539.

the functioning of the law most difficult. The bill was finally passed by a vote of 65 to 13.[44] Mr. Shetterly moved that the bill be ordered to take immediate effect. For some reason not ascertainable in available literature, he later withdrew his motion. The bill was laid on the table temporarily, but was finally approved and became a law on March 27, 1867.[45]

**As originally enacted, the law provided for the assistance of a committee composed of physicians from the State Medical Society and the Medical Faculty of the University of Michigan.[45] This committee was expected to assist the Secretary of State in the preparation of the annual registration reports. As pointed out later by Secretary Baker, this did not provide the Secretary of State with adequate medical assistance on which he could depend. It is of interest also to learn from Dr. Baker that "no committee was appointed to supervise the work of the Reports by either of the bodies of medical men mentioned in the law."[47]**

In preparing the first annual report of the vital statistics of the state, the Secretary of State was assisted by Dr. I. H. Bartholomew of Lansing who "rendered valuable assistance in the nomenclature and classification of diseases."[48]

Dr. Bartholomew at the time was chairman of the Committee on Vital Statistics of the State Medical Society.[49] His work also was evidently well esteemed by the State Medical Society, for, at Dr. Geo. Ranney's suggestion, a resolution was passed by the Society thanking him for his labors upon the report.[50]

In the following year, assistance was rendered the Secretary of State by Dr. Geo. Ranney, also a member of the Committee on Vital Statistics of the State Medical Society.[51] He was largely responsible for the second annual report of 1869 for which he also received the thanks of the Secretary of State and State Medical Society.[52]

In 1869, the task fell to Dr. Henry B. Baker of Wenona, a new member of the Committee on Vital Statistics of the State Medical Society.[53] He retained the position of Registrar of Vital Statistics until 1873, at which time he became Superintendent of Vital Statistics and Secretary of the State Board of Health.[54] He remained in close touch with the system of vital statistics until 1883 when by an act of the legislature the work was practically withdrawn from all medical supervision.[55]

In the preparation of the annual registration reports, the Secretary of State, the Hon. Oliver L. Spaulding, was greatly influenced by the work being carried out in Massachusetts. In the first annual report, he freely acknowledged his obligation to the Secretary of State of the State of Massachusetts, the Hon. Oliver Warner, "for reports, forms of blanks, and information" furnished him.[56]

### Imperfections of Original Registration Law

From the very time that the registration law was first put into effect it was realized by the Secretary of State and those physicians who assisted him, that it possessed many imperfections which detracted from its efficiency.[57] As explained Dr. I. H. Bartholomew, "The reason why a better registration law was not passed by the legislature, was, that the members were wholly unacquainted with the needs of the medical profession in this respect."[58]

Supervisors and assessors of counties in the state neglected to report births and deaths, alleging that they received no additional salary for this increase of their duties.[59] Moreover, certain provisions relative to the time for gathering birth and death statistics also caused poor returns. According to the law, the supervisor or assessor was not expected to ascertain by inquiry of the inhabitants the births and deaths which had occurred in their respective townships, cities, or wards during the year until the tenth day of April to the first day of June of the year following.[60] As Dr. H. O. Hitchcock pointed out, there were three major sources of error:

[44]Loc. cit.
[45]An. Rep. Reg. of Births, etc., Secretary of State, 1:195, 1868.
[46]Ibid., p. 199; Trans. M.S.M.S., 24:2, 1894.
[47]An. Rep. Reg. of Births, etc., Secretary of State, 4:15, 1872.
[48]Trans. M.S.M.S., I (1869), 12; the first annual report of vital statistics included a single table of results of meteorological observations made at the Agricultural College during 1867 by Prof. R. C. Kedzie. (An. Rep. S.B.H., 9:114.)
[49]Loc. cit.
[50]Ibid., p. 16.
[51]An. Rep. Registration and Return of Births, Marriages and Deaths, II (1868), iv.; Trans. M.S.M.S., 1:13, 1870.
[52]Ibid., p. 17.
[53]Trans. M.S.M.S., 24:2, 1894.
[54]An. Rep. S.B.H., 10:38.
[55]Trans. M.S.M.S., op. cit., p. 2.
[56]An. Rep. Registration and Return of Births, Marriages and Deaths, op. cit., p. vii.
[57]C. L. Wilbur, "Registration of Vital Statistics in Michigan," Trans. Michigan State Medical Society, 24:2, 1894.
[58]Trans. M.S.M.S., 1:17, 1867.
[59]Ibid., p. 39.
[60]An. Rep. S.B.H., IV, 10.

1. The time during which these inquiries are to be made—more than a year after many of the events have transpired—would be pretty sure, either from forgetfulness or from change of location, to lead to a great number of omissions.

2. These facts are to be ascertained by actual inquiry or otherwise, as the indolence, carelessness, or indifference of the officer may suggest as the easiest way to satisfy the state, which makes no provision for determining the faithfulness or punishing the unfaithfulness of those to whom it commits this duty. The fee paid for each recorded case is not sufficient of itself to induce great accuracy, nor are there any methods provided for proving the accuracy of these reports.

3. The supervisor or assessor may fairly be presumed to be not a physician, and with no special qualifications for ascertaining exactly or recording with accuracy, of what disease any person may have died several months or a year before. He must take the statement of the family, friends or neighbors; and how much reliance there is to be placed upon the memory of such persons as to the cause of a death that took place months before, any educated physician can understand who knows how his diagnosis of disease is, often at the time of making it, falsified or caricatured by ignorant and forgetful friends and prejudiced neighbors.[61]

To overcome this latter difficulty it was suggested by Dr. Baker that the office of registrar be created in each city and township of the state.[62] "In my opinion," said Dr. Baker, "this Chief Medical Officer of Health which should exist in every city, village, and township, is the proper person to take charge of the statistics of births, and deaths in such city, village and township."[63]

Following his appointment as Registrar of Vital Statistics in 1869 and thereafter until he became Superintendent of Vital Statistics, Dr. Baker made many suggestions to the Secretary of State for the improvement of the Registration Law.[64] In his frequent appearances before meetings of the State Medical Society, he also took occasion to point out needed changes in the law to the physicians in attendance at these meetings.[65]

Dr. Hitchcock was likewise a frequent speaker on the subject at medical meetings. In his annual address before the State Board of Health in 1876, he stated that, "One of the strongest and most persistent efforts of this Board should be to secure more complete and reliable vital statistics of the people of Michigan."[66] He objected to the gathering of these statistics by supervisors and assessors claiming that they should be gathered by those persons who were participants in the event as physicians, midwives, sextons, and parents. He also was in favor of assessing penalties for those who failed to enforce the law.[67]

As might be expected, the several sources of error already pointed out did lead to imperfect returns of birth, marriage and death statistics, thus depreciating the value of those which were gathered. For many years, at least forty per cent had to be added to the reported deaths in order to approximate the probable number of deaths, according to MacClure.[68] In 1871, Dr. Baker declared on one occasion that not more than fifty-five per cent of the actual deaths in the state were reported.[69] As for the systems of vital statistics in the cities of the state, conditions at this time were still worse. Speaking before the Sanitary Convention of Grand Rapids, in 1880, Dr. Baker declared, "The vital statistics of the city, which lie at the very foundation of effective public health service, have never been properly collected. No tables carefully compiled under the immediate supervision of a medical man or vital statistician are regularly published by any city in Michigan."[70] In 1880, at a meeting of the State Board of Health, Dr. H. F. Lyster called attention to the lack of accurate statistics in Detroit.[71] "One of the great disadvantages which the Board had to contend with through most of its existence," said MacClure, "was the imperfect returns of deaths."[72]

In the course of time many attempts were made to improve on the original registration law of 1867. Compensation of supervisors and assessors who gathered the statistics was openly advocated by Secretary of State O. L. Spaulding in 1870 in order to encourage better reporting;[73] this suggestion was made again in 1883 by the Hon. LeRoy Parker of the State Board of Health.[74] The Committee on Vital Statistics of the State Medical Society repeatedly exhorted the physicians of the state to make their statistics "as full and perfect as possible."[75] At the annual meeting of the Society in 1872, a committee was appointed to study a portion of President Hitchcock's address which dealt with vital statistics

[61]Loc. cit.
[62]Ibid., p. 127.
[63]Loc. cit.
[64]An. Rep. Reg. and Return of Births, Marriages and Deaths, op. cit., 6:xi, 1872.
[65]Trans. M.S.M.S., 3:82,1872.
[66]An. Rep. S.B.H., 4:9.
[67]Ibid., p. 11.
[68]MacClure, op. cit., p. 23.
[69]An. Rep. S.B.H., 4:10.
[70]Ibid., 8:129.
[71]Ibid., p. xlv.
[72]MacClure, op. cit., p. 23.
[73]An. Rep. Reg. and Return of Births, Marriages and Deaths, 3:4, 1869.
[74]An. Rep. S.B.H., 11:xxxii.
[75]Trans. M.S.M.S., op. cit., p. 83; ibid., 1:16, 1869.

and preventive medicine. The deliberations of this committee, which followed, ultimately led to the creation of the position of State Superintendent of Vital Statistics.[76]

Attempts to amend the law by legal methods were repeatedly made by members of the State Medical Society. The first attempt in 1869, so the records point out, was successful. Act No. 125, Session Laws of 1869, was approved April 3, 1869.[77] This amendment made the registration year identical with the calendar year. From then on the attempts made were generally unsuccessful, or fell short of their goal. In 1871, another amendment to amend Section 3 of Act No. 125 of the Session Laws of 1869 met with so much opposition from both branches of the legislature that it failed to pass.[78]

At the annual meeting of the State Medical Society in 1872, the Committee on Vital Statistics made recommendations in a lengthy report to secure more full and accurate returns of births, diseases and mortality. Available records, however, fail to explain what action the Society took.[79]

In 1876, at a similar meeting, Dr. Baker made the recommendation that a committee be appointed to draft a memorial to the legislature for the enactment of a law amending the law for the collection of vital statistics.[80] This suggestion was accorded a favorable reception, and a committee consisting of Drs. Baker and Hitchcock was appointed to draw up such a bill and to report at the next regular meeting.[81] Again for some reason that the records fail to reveal, no further mention of the undertaking is made at the next meeting.

Again in 1878, Prof. R. C. Kedzie recommended to the Society that a committee be appointed to prepare a suitable bill which should incorporate the needed changes. He further recommended that this committee bring the subject before the legislature for their consideration.[82] Dr. Baker and the Hon. LeRoy Parker were named to the committee, but again the sources perused fail to disclose any further action being taken.[83]

Not until 1897 did the members of the medical profession finally succeed in getting a more desirable law passed which would bring about the needed changes. This law provided for immediate return of birth, marriage, and death reports.[84]

### Role of Dr. Henry B. Baker

In the foreground always, Dr. Baker labored incessantly to improve the vital statistics of the state, from the time he came to Lansing in 1869 to assist in the preparation of the annual registration reports, until the system of collecting vital statistics became more accurate. For several years prior to Dr. Baker's becoming the Superintendent of Vital Statistics, the need for a medically trained statistician had demonstrated itself to the Secretary of State responsible for carrying out the Registration Law. "In the preparation of this report (1870)," said the Hon. O. L. Spaulding, "the services of a physician of recognized ability and standing in the profession are not only desirable, but almost indispensable."[85] The Hon. Daniel Striker, who succeeded Mr. Spaulding, went even a step further. In his introductory remarks to the fourth registration report, he stated that the preparation of vital statistics called for the services of "an experienced statistician, who should be a physician of recognized ability and standing in the profession." "The law," he said, "should provide compensation corresponding with its requirements."[86] Dr. Baker's excellent work won for him immediate reputation. Each annual report carried words of praise for him from the Secretary of State. Said the Hon. O. L. Spaulding of Dr. Baker in 1870, "I take pleasure in acknowledging my obligation, and to whom is due whatever of merit it (referring to the Registration Report of 1869) may contain. Possessing a rare fitness and ability for the work, he has devoted to it much time and labor."[87] Coming to Lansing finally in October, 1870, to superintend the compilation of vital statistics, he soon became an ardent advocate of everything pertaining to preventive medicine, and as such became one of the most powerful figures in the movement for sanitary reform.[88] Typical of the wisdom he showed

[76]Ibid., 3:41, 1872.
[77]An. Rep. Reg. and Return of Births, Marriages and Deaths, 1:195, 1869.
[78]Trans. M.S.M.S., 24:4, 1894.
[79]Det. Rev. Med. and Pharm., 7:323, 1872.
[80]An. Rep. S.B.H., 5:130.
[81]Ibid., p. lv.
[82]Ibid., 6:8.
[83]Ibid., p. liv.
[84]MacClure, op. cit., p. 23.
[85]An. Rep. Reg. and Return of Births, Marriages and Deaths, op. cit., p. 4.
[86]Ibid., 4:v, 1870.
[87]Ibid., III, 4.
[88]MacClure, op. cit., 9; at a meeting of the state medical society, President I. H. Bartholomew appointed Dr. A. B. Palmer of Ann Arbor to assist the Secretary of State with the preparation of the Registration Report. Dr. Palmer, however, gave way to Dr. Baker in order that "the effort for the proposed State Board of Health might be better subserved. (Loc. cit.)

in whatever he set his mind to, is a report he made at a National Conference of State Boards of Health in 1886 relative to the adoption of a uniform system of vital statistics for the United States and Canada. It was his opinion that to adopt such a system as was proposed would be to adopt permanently an imperfect system. Instead, he advised that each state and province employ a man to perfect a system within his own state before such a system be contemplated.[89]

### Social Statistics

Another form of statistics that received attention from legislators at about this same period was social statistics.[90] On complaint of the Census Bureau at Washington in 1870 of "the great difficulty in obtaining from this state what are termed social statistics," Gov. Henry P. Baldwin recommended legislation to secure such statistics in Michigan in July, 1870, and in September of the same year the legislature passed a law for this purpose.[91]

[89]An. Rep. S.B.H., XIV, 187; in 1878, Dr. Baker was appointed to a committee to confer with other similar committees in other states relative to a uniform plan for the registration of births, marriages, and deaths. (An. Rep. S.B.H., 7:xlv.)
[90]Jour. H. of Rep. State of Michigan, 8:61, 1870.
[91]Ibid., p. 24; Ibid., p. 110.

MSMS

# Presacral Resection for the Relief of Pain

**By John C. Scully, B.S., M.D.**

**Menominee, Michigan**

JOHN C. SCULLY, M.D.

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THE historical aspects of presacral resection have been most thoroughly reviewed in a paper by Walter D. Abbott, M.D., of Des Moines, Iowa. As Dr. Abbott points out, this operation is not new, since it was performed as early as 1898 by Jaboulay. However, recently (1926-1940) there have been numerous articles written about the operation which indicate renewed interest in this procedure. It has been recommended for a variety of conditions, including Hirschsprung's congenital megalocolon, urinary vesical pain due to tuberculosis, and intractable bladder infections, and dysmenorrhea of the so-called functional type.

In some instances the results have been gratifying, and in others the results have been indifferent. Since this particular type of surgery is in its comparatively early phase, I believe that any contribution to our present knowledge, no matter how minor, may be of some value.

Resection of the superior hypogastric plexus for the relief of severe dysmenorrhea has been endorsed by such competent surgeons as G. Cotte of France, A. A. Davis of England, Walter D. Abbott, Winchell McK. Craig, and Nelson M. Percy in this country, and with these recommendations in mind, I have performed a presacral resection for the relief of pain presumably due to a congenital uterine anomaly.

### Case Report

The patient, M. G., an unmarried white female of twenty-three, came under observation, complaining of severe dysmenorrhea of ten years' duration. Her menstrual history was as follows:

*History.*—The menarche occurred at the age of thirteen, and from the onset her periods were markedly irregular, varying from the usual twenty-eight days to five or six months. During each period she had very scant flow, using only one or two pads daily. No clots were passed at any time. Each period was associated with pain severe enough to necessitate four or five days of bed rest and the liberal use of opiates. There was slight leukorrhea between periods. She denied intercourse or venereal infection. Her last period prior to coming to the office was, as usual, associated with very severe dysmenorrhea, low back pains, and general malaise.

*Examination.*—Complete physical examination and the usual laboratory procedures, including basal metabolic rate, failed to reveal any abnormalities except of the pelvic viscera. The introitus was virginal so that satisfactory pelvic examination could be carried out only under anesthesia. The patient consented to this examination and it was observed that the Bartholin and Skenes glands were normal. The cervix was small and pointed anteriorly. The external os was patent and there was slight cervical erosion. The uterus was apparently displaced to the left. It was anteflexed, smooth, firm, and nulliparous. At the right utero-cervical junction there was a mass protruding into the right adnexa equal in size to the uterus and apparently connected to the uterus at the above location.

This mass also seemed anteflexed. The left tube and ovary were normal in location, size, shape, consistency, mobility, and attachments. On the right side a normal tube and ovary could also be palpated and were not apparently displaced by the mass described. The mesial attachment of the right tube could not definitely be determined. The adnexa, apart from the above, felt normal. A diagnosis of subserous uterine fibromyoma was made, and uterus didelphys unicollis was also considered. As a conservative measure, in order to correct the dysmenorrhea, the cervical canal was dilated up to the caliber of a No. 22 French sound at the time of examination. The patient had been given appropriate glandular therapy prior to this examination and in spite of this no correction of her menstrual irregularity had been effected.

The patient was advised to wait until another period to determine if dilatation would afford relief. This period occurred after 6 weeks from the onset of the previous period and was in no way affected by the dilatation and the previous severe menstrual pain persisted. Operation was then advised.

*Operation.*—At operation the patient was found to have uterus didelphys unicollis. This particular anomaly appeared singular in that each of the uteri were equally developed and situated in the same relative position. There was a peritoneal fold passing from the sacrum anteriorly between the base of the two uteri and merging anteriorly with the peritoneum covering the posterior aspect of the bladder. Attached to the lateral cornu of each uterus was an entirely normal tube, ovary and broad and round ligament. There was no other demonstrable lesion or abnormality in the pelvis.

Since pain was the primary complaint, there seemed to be no reason to attack the anomaly surgically, and the case presented an ideal indication for division and resection of the presacral nerve. This procedure was carried out after the technique described by Drs. N. M. Percy and H. P. Beatty with a modification suggested by Dr. A. H. Curtis. The operation was completed by a radial cauterization of the cervix. The patient made an uneventful recovery.

*Convalescence.*—During her convalescence the patient had a menstrual flow lasting 6 days (normal for this patient) and during this time was entirely free of pain. Since the operation the patient has had 10 normal periods. She has faithfully communicated with me at each period and assures me that she has no pain at all with the catamenia and that the only discomfort experienced has been the usual menstrual malaise. Not anticipating amelioration of the irregularity by the above surgical procedure, suitable glandular therapy was instituted immediately after the patient left the hospital. As previously stated, she has had 10 periods at about the usual 28-day intervals, and it may be assumed that this therapy has helped to establish a normal menstrual cycle.

## Discussion

Herein is presented a case of dysmenorrhea associated with a uterine anomaly. The relationship between the anomaly and dysmenorrhea is of course questionable, as many of these anomalies are "silent." However, in the absence of other lesions of the pelvic viscera, and with all conservative treatment of the accepted sort having failed to relieve the pain, it must be assumed that, in a measure, this patient had pain as a result of the anomaly described, and derived benefit from presacral resection.

Personal communications with surgeons elsewhere reveal little or no experience with this operation for relief of pain due to congenital uterine anomalies, and it is hoped that this report may stimulate an interest in this type of surgical approach.

## Summary and Conclusions

1. Presacral resection for pain presumably caused by congenital uterine anomaly is reported.
2. This case of uterus didelphys unicollis appears to be unique in being bilaterally symmetrical and because the tubes and ovaries, broad and round ligaments were entirely normal and also symmetrical.
3. Entire relief of severe dysmenorrhea presumably due to congenital uterine anomaly was obtained by division and resection of the superior hypogastric plexus (presacral nerve).

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MSMS

# The Relationship of the Roentgenologist to the Physician and Surgeon*

**By Leon M. Bogart, M.D.**

**Flint, Michigan**

Leon M. Bogart, M.D.

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■ Roentgen, when he discovered the x-ray in 1895, uncovered a hornet's nest. The doctor, secure in his fringe of scientific terms, was too close to the aura of empiricism to be jolted out of his toppling Galenic conception. Keen's "Surgery," published in the latter part of the 19th century, spoke of cholecystitis as being caused by tight lacing, but spoke very little of the disease itself. Tait, in the late seventies of the 19th century, doubted the wisdom of asepsis in surgery. Osler's edition of 1905 has little reference to x-rays. Surgeons abroad early recognized its value, for in 1896 reports of surgical pathological lesions were described with x-ray findings. In 1907, in Dr. DaCosta's "Surgery," little reference was made to x-ray in the text, but in a discussion rather extensive mention is made of possibilities, also the advisability of mixing bismuth with food to visualize the gastro-intestinal tract was discussed.

The mysterious ray, piercing the depth of tissues and recording different density, not only brought out the silhouette of bone, but emphasized the necessity of physical comparison of shadows in physiology as well as pathology. When Cannon and Williams first gave an opaque meal, the innermost secrets of eternally covered unknowns were blasted open to the curious gaze of the delving scientists, as though it were the secrets of the solid undercore of the earth made available for scientific observation. When early reports of x-ray burns and x-ray epithelioma became known, the destruction of the tissues became a hunting ground for the investigator and research worker, to turn the flood of destruction to the nihilist cell—the cancer cell.

From the little flicker of the first gas jet vacuum tube emitting the unknown ray that man made and controlled, grew the precise tabulator of pathological processes of today.

Friedenwald, many years ago, brought to the attention of the roentgenologist the irregularity of the mucosa in gastric ulcer, and now this sign is coming into prominence with the improvement of the technique of rugæ visualization. The laboratory evaluation of gastric ulcer diagnosis has been greatly superseded by the x-ray findings, but here the surgeon must remember that often one is apt to read into the plate nonexistent pathology.

It is indeed a far cry from the full hour exposure required in the early days of x-ray to the present split second exposure with its exact delineation and clarity. The art of physical diagnosis and great personal error has largely given way to the penetrating ray. Yet we, as physicians and surgeons, by relying too much upon the trained interpretation of the x-ray findings, must not lose sight that the personal equation is not to be discounted, for the radiologists differ between themselves just as frequent-

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ly as the physicians or surgeons. The plate is inanimate—the human mind reads its signs.

**One of the most useful branches of radiologic technic, and one probably requiring most judgment, fluoroscopy has lent itself to be the most blatant instrument of the charlatan. Newspaper and radio advertisements are full of misconceptions of fluoroscopic values and the public is misled as to its possibilities. All of us, I am sure, deplore its misuse and hope the public can be educated to its limitations.**

The importance of the x-ray in the diagnosis of tuberculosis and as a check-up of its therapeutics has been proved invaluable. The detection of metastases and emboli is another chapter of scientific detection greater than fiction. Of course the oldest service for which x-ray was used was the diagnosis of bone pathology and perhaps it is the one fraught with the most danger to the surgeon, because of the perfection expected in the treatment of fractures. The measurements and comparisons which the student of yore was taught are entirely disregarded by him now, yet in my judgment not to be discarded, for if length, alignment and natural contour be taken in consideration, especially in the young, seeming faulty position of bone fragments are still molded into position as in the days antedating the x-ray. It is noteworthy that the attending physician only too often expects the roentgenologist to be the all-round specialist of interpretation, a glorified scientific soothsayer, which, of course, is flattering but leads to a yoke of dependence.

**The flat plate herring-bone appearance of acute ileus or the telltale gas bubble in a subphrenic abscess, with the characteristic elevation of the diaphragm admit of no dispute in the diagnosis if taken in conjunction with the history and clinical course. The pathognomonic appearance of pencil-like narrowing in regional ileitis and many other positive findings of the x-ray form the bulwark of the diagnostic aids to the surgeon. Lesions of the large bowel or the stomach need more than ordinary acumen to diagnose unless definite pathologic size has developed. The surgeon expects too much when he looks to the roentgenologist to find the above-mentioned lesions in the initial stages, and negative findings should not deter the surgeon from proceeding with an exploratory operation. It is desirable to be able to localize early stages which do not show gross changes, and careful and minute study, will, in many instances, detect changes in the physiologic contour brought about by the microscopic changes. The contrast obtained by forced gas distention of the bowel lumen has made many early lesions possible of detection. Even the etiological factor can be told within a certain degree of accuracy, due to the predilection of specific pathologic lesions for certain parts of the alimentary tract or bones.**

We have to recognize that frequency of x-ray determinations does something to the end of the fractured bones, which retards the formation of callus. X-ray signs of bone dissolution, destruction and regeneration require knowledge of normal anatomy and physiology first, and sequence as well as regional pathology. Early pathologic changes become apparent to the skilled roentgenologist, as an irritable duodenum or pylorus may be recognized before full clinical symptoms of gastric ulcer appear, or an impending Suedeck's syndrome may be prognosticated by the early and persistent atrophy of bone.

To Rowntree and Abel, Cole and Graham, Swick and others, we owe the demonstration of the selective absorption of radio-opaque dyes given orally or intravenously and its use magnificently demonstrated in their widespread application. It is not necessary to remind you of opaque substances introduced through the ureters and per urethra into the bladder and the introduction of an opaque solution into the bladder for determination of bladder malignancies, or as the author lately used it in determination of ruptured urinary bladder.[2] The use of radio-opaque oils or dyes to visualize spinal lesions and vascular pathology has been widely reported, requiring great skill and coöperation of roentgenologist and surgeon. The introduction of gas for ventriculograms also needs the teamwork mentioned above, and the use of ethylene instead of air seems to be gaining favor. The removal of the opaque dyes or oils used is of concern to both roentgenologist and surgeon, and is of great importance to the patient. The surgeon

must not forget that microscopic changes do not manifest themselves in an x-ray plate; therefore, osteomyelitis, malignancies, or early bone deposits are not recognized in the early initial stages, and when negative to x-ray must not be dismissed as absent. Localization of foreign bodies on the plate does not always spell a spectacular removal, for I admit many difficulties that I had to cope with, even after excellent x-ray localization.

I can only allude to the brilliant chapter written by roentgenology in the field of therapeutics, especially deep x-ray in pre- and postoperative care of malignancies, as well as the direct attack of the lesion. Many enthusiastic reports in the treatment of acute regional infections have come to the fore, especially in acute postoperative parotitis or thrombophlebitis.

Controlled injection of radio-opaque media into fistulous tracts as well as the visualization of the biliary tract and detection of hidden duct stones by means of the x-ray on the operating table is being put to more frequent use.

The physician and surgeon must educate the laity that a roentgenologist is not a photographer of structures. We know that the x-ray plate is a record of the normal and abnormal anatomy and physiology; its deciphering requires skill and training, requiring a great deal of time and perseverance.

Baetzer and Waters[1] state that the roentgenologist has four inseparable friends, the anatomist, pathologist, internist and surgeon, and I wish to add a fifth one, the physiologist. With them his work rises or falls. The physician and the surgeon should not shed their responsibility and expect the roentgenologist to make the diagnosis for them. The roentgenologist should be considered a highly skilled physician with whom his colleagues coöperate and coördinate as one of the important highways to reach the destination of a workable diagnosis and possible cure, and not the sun around which the medical and surgical diagnosis revolves.

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# The Physiology of the Nose*

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■ It is important that the rhinologist be familiar with reactions of the normal nasal mucous membrane to the various environmental conditions so that he may be better able to evaluate symptoms of which a patient may complain. Many persons in robust health complain of symptoms referable to the upper respiratory tract which on final analysis may be explained on a physiologic basis.

In 1926, the writer undertook a study[4] to determine the nature and extent of reactions of normal nasal mucous membrane. Throughout this study persons with apparently normal noses were observed. Ten persons in each of the first six decades of life were selected. The nasal membrane in every case was carefully observed in each of the atmospheric conditions so that a total of 240 observations were made. In selecting the conditions under which to observe the reactions of the nasal mucous membrane, an attempt was made to supply every possible relationship of temperature and humidity of the atmosphere which is ordinarily encountered.

Some of the results noted were as follows:

**In moderate outside air with a temperature of from 13 to 18° C. and relative humidity of from 50 to 60 per cent, every subject showed slight swelling of the turbinates and the nasal secretions were scantily distributed over the mucous membrane. There was a correspondingly large breathing space. Apparently the least amount of work is done by the nose in such warm, moist air. The opposite extreme was observed in cold, damp air. In warm, but very dry air, the turbinates were considerably swollen though less than in cold damp atmospheres. It was thought the swollen tur-**

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**binates probably act as an adaptive reflex mechanism in preventing too free admission of the warm dry air.**

When subjected to varying environmental conditions, the nasal mucous membrane showed a great variation in the rapidity of response in different individuals. In general, adolescents showed the most active mucous membrane. From adolescence until old age there was a progressive retardation in the response of this membrane.

### Cycle of Reaction

In 1923, Lillie[14] called attention to the idea of a cycle of reaction in the nose. In 80 per cent of the subjects, this cycle was apparent, that is, the turbinates of one side of the nose were filling while those on the opposite side were throwing off secretion. This cycle did not always take place to the same extent. Cold, damp atmosphere prompted more pronounced changes than the less provocative environments. These cycles of reaction occurred over varying lengths of time ranging from 15 minutes to two hours.

Subjects were also examined in recumbent postures because of the common complaint of nasal obstruction on the dependent side at night. The lower side nearly filled or filled completely in every case in an average time of twenty-five minutes.

The nasal secretions seemed to bear a definite relationship to the congestion of the turbinal structures, that is, being more copious with swelling of the turbinates and vice versa. During adolescence, an age of physiologic activity, the nasal secretions were found to be abundant. In old age and advanced middle life, the secretions were much reduced in amount.

In about 10 per cent of the cases, there was definite debris about the fibrissæ of the nasal vestibules, and in at least half of the nasal cavities, the secretions contained fine debris. Every subject examined in the lower temperatures showed moisture in the vestibules. This moisture was never observed in warmer air and could be produced by exposing the subject to cold air for five minutes. The logical explanation of this fact is that cooling the expired air lowers its saturation point and some of its moisture must be condensed.

The conclusions reached from this study were:

**1. The nose has three definite functions other than olfaction; to warm, moisten and filter the inspired air.**

**2. The mechanism is the mucous membrane, the available surface of which is increased by turbinal turgescence.**

**3. The nose reacts differently under various environmental conditions and at different ages.**

**4. Most noses show a fairly definite cycle of reaction.**

**5. The following symptoms need not be due to pathologic conditions and can readily be explained as physiologic responses; nasal obstruction in hot dry rooms; the watery nasal discharge in cold weather and during adolescence; the dropping back into the throat of secretions often containing debris, and obstruction of the nose on the dependent side.**

### Functions

Since making this study, many enlightening contributions have appeared in the literature on the function of the nose and its mechanism. Time permits a rather brief review of only some of these. Humidification and warming of the inspired air are important functions of the nose.[20] Humidification is essential to the processes of alveolar respiration. Light is also essential to the maintenance of the cilia and their protective mucous blanket.[21] Air laden with dust or containing bacteria is cleansed to a large extent in the nasal passages.[3] Hilding's[6] studies on drainage of nasal mucus will be referred to later.

Lehmann devised a simple but ingenious technic for measuring nasal filtering efficiency. He found the median average of nasal efficiency 46 per cent for normals and 27 per cent for silicotics. Tourangeau and Drinker[26] found efficiencies lower than those reported by Lehmann. They found practically no efficiency over 30 per cent and inferred from this that the dust filtering efficiency of the nose is too low to be of importance in preventing fine dust from reaching the lungs.

Lehmann[13] did some interesting work to show the significance of dust filtering efficiency in the development of silicosis. This dust absorptive ability of the nose he found to vary widely. When low, the subject could work but few years if he were to avoid silicosis. When high, the worker seldom gets the disease even though employed many years in this dusty environment.

### Mucus Secretions

In recent years many interesting investigations have been made on the mucous secretions of the nose. Its source is the goblet cells and mucous glands of the nasal membrane. With these two type of glands in operation, Leasure[12] believes quite a variety possible in the quality of the nasal secretions present according to which type of gland is more active.

Tweedie,[27] Mittemeier,[17] Buhrmester[1] and Hilding[7] have made important contributions in regard to the pH of nasal mucus. Their findings have varied, some reporting the pH to be acid and others alkaline, with resulting confusion. It remained for Peterson[18] to clear up these discrepancies this past spring. He studied the nasal mucus in relation to environmental change and to other changes occurring in the organism. He pointed out that single readings taken at different times mean little or nothing. He therefore carried out this observation in day-to-day fashion on a number of subjects.

The pH of the normal membrane was changing constantly. They found that there is a distinct diurnal rhythm, there is a distinct rhythm associated with gastro-intestinal activity corresponding to the intake of major meals and there is a meteorological rhythm. PH curves were charted and below each the curve for the bacterial count of a circumscribed area of the mucous membrane. There was a constant change in the bacterial population as it fluctuates with the physiological state of the mucous membrane. For example, when weather gets colder, the pH increases; that is, the mucus becomes more alkaline and the bacterial count rises sharply. When weather gets warmer, the reverse takes place indicating that acid mucus inhibits the growth of organisms[2,19] (Fig. 1).

The destruction and removal of bacteria from the nose is not entirely mechanical, but is also antiseptic. This work is done by an enzyme normally present in the nasal mucus which is a powerful antiseptic.[8] Hilding[9] found this lytic power is reduced in the first two days of a cold.

### Drainage

The drainage of nasal mucus was studied by Hilding.[6] Because of its importance, some of his findings will be briefly reviewed. The film of nasal mucus extends like a continuous membrane over all the nasal surface. This film is in continuous motion throughout its extent. The rate of motion varies in different regions. The greatest rate is generally found in those areas best protected from the force of the inspired air, that is, in the meati. The mucous film of blanket

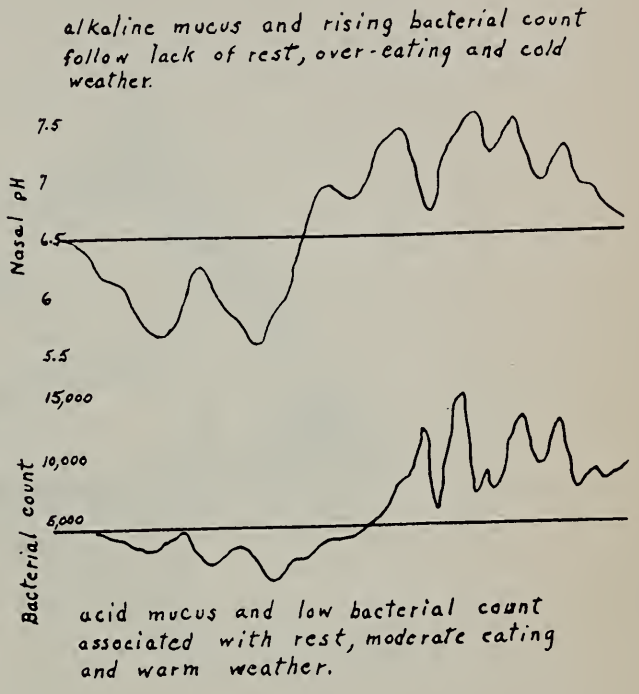


Fig. 1.

is motivated by four forces: (1) by the ciliary activity directly, (2) by gravity, (3) by traction due to cilia, and (4) by traction from the pharynx as in swallowing.

The mucous membrane of the anterior one-third of the nose is relatively inactive due to lack of cilia. The drainage of mucus from this area is different from the rest of the nose. Drainage is slow and is accomplished by traction of the secretions on the inactive membrane by ciliary movements in the adjacent active membrane. In other words, it is dragged as a net. Because of the slow drainage in this area, dust and cosmetics are often seen whereas the remainder of the nose is clean. At least an hour is required to remove particles from the anterior one-third, but only five to ten minutes will suffice for the posterior two-thirds. Hilding in a single sentence gives a rather comprehensive picture of the mucous film, "the layer of secretion covering the surfaces is at once a protective blanket and endless conveyor, a medium for ciliary action, an impervious barrier to bacteria and a trap for them, a drag-net to sweep clean the non-

ciliary spots, a humidifier, a diffusion medium and a lubricant" (Fig. 2).

The cilia within the nose are the chief agent in maintaining the normal clearance of the nasal cavity. All epithelia of the nose are modifications

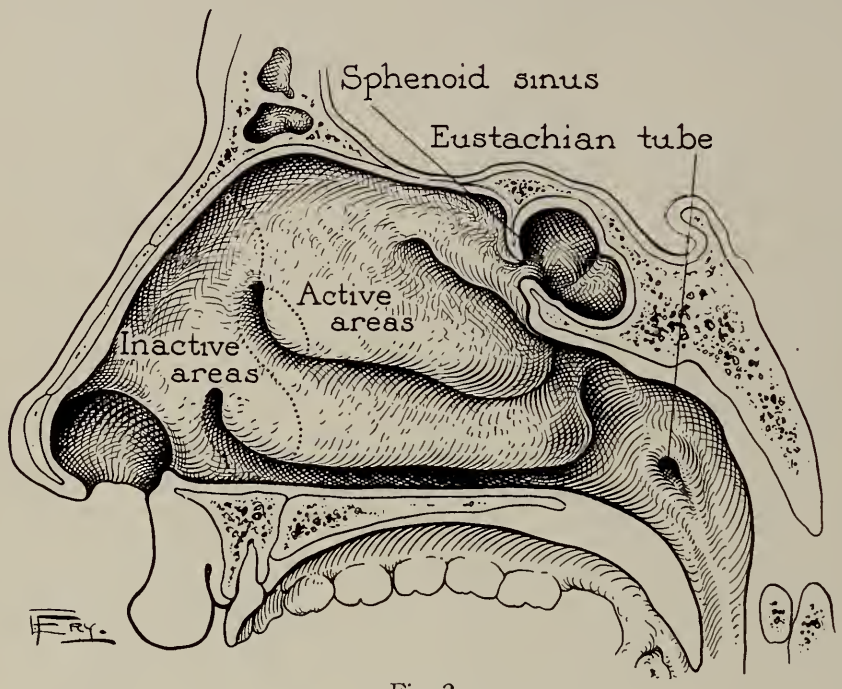


Fig. 2.

of one type, that is, ciliated epithelium. Modifications are caused by varying degrees of exposure to in- and out-flowing air.[8]

Lucas and Douglas[15] found that the so-called mucous film or sheet is composed of two parts: an outer stratum of viscid mucus which rests on the tips of the moving cilia and an inner fluid layer of low viscosity, which forms a suitable medium for the vibrating cilia. The inner layer flows with the vibrating of the cilia, but the outer viscid layer may or may not respond to the beating of the cilia against its under surface.[16]

Ciliary activity is autonomic with the cell, it may be a sympathetic nerve influence, but is not proved. It varies some with temperature, the optimum being between 28 and 33 C.[22] Although the cilia serve as a first line of defense they must not be regarded as weak and frail as pointed out by Heine.[5] A single dose of unfiltered roentgen ray of eight erythemas is the maximum for the skin of man. However, the evidence points toward the fact that these frail-appearing cilia will stand three times such a dose with impunity.

The functional state of the mucous membrane including their secretory and ciliary activity is regulated and controlled through the autonomic and afferent nerves.[11] It is interesting to note that the cavernous or erectile tissue in the nasal mucosa does not always conform to the vascular state of the adjacent mucous membrane, although its blood vessels and those of the adjacent mucous membranes are innervated by the same nerves. Various investigators,[10] particularly Sternberg, have called attention to the fact that engorgement of the cavernous tissue frequently takes place while the mucous membrane is relatively ischemic and that not infrequently it contracts while the mucous membrane is markedly hyperemic. The explanation lies in the fact that the capillary bed in cavernous tissue is interposed between veins whereas the capillary bed in other parts of the nasal mucosa is interposed between arteries and veins. In view of this arrangement, reflex stimulation which elicits vasoconstricture in the nasal mucosa might prevent emptying of the capillary bed in the cavernous tissue by contraction of veins into which it drains.

Clinical observations as well as medical literature forces one to recognize the interrelationship between the nose and the rest of the body. This was pointed out in Peterson's findings regarding the rhythm of the pH of nasal mucus associated with gastro-intestinal activity. The nasogenital

relationship has also been definitely established. Mortimer and his associates found that the nasal mucous membrane of pregnant women showed increased redness and swelling in the later stages of pregnancy. Mackenzie and subsequent observers have confirmed the view that in a certain percentage of normal women there is hyperemia and swelling of nasal mucosa during menstruation. Many reports have been made associating nasal stuffiness and sneezing with acts of copulation and sexual excitation.[23]

### Effect of Chilling

Some very important studies have been made on the effects of chilling of body surfaces. Experiments were made with fans, cold $H_2O$ and ice with fairly uniform results.

Taylor and Dyrenforth[25] have shown that cold water takes heat from the body twenty-seven times faster than air. Individuals in cold $H_2O$ without exercise may manifest a drop of over 10 degree F. in the nose, often with consequent colds.

Visscher and Spiesman[24] point out that a change in temperature of only two or three degrees in the mucous membrane of the nose means a marked alteration in blood flow that produces such a fall of temperature.

A fall of even one or two degrees may mean that there is an absolute anemia of the mucosa and consequently a lack of oxygen which is extremely favorable for the growth of pathogenic organisms. The cardinal factor in avoiding upper respiratory infection is the maintenance of a constant average temperature in the nose because any considerable degree of deviation from this average for appreciable periods of time will result in morbid changes.

Undritz and Sassassow[28] also studied the effect on the nasal mucous membrane resulting from cold applied to the skin. They concluded that the cooling of the nasal membrane depended not only on external cold applied, but also on the constitutional make-up. The decrease in nasal temperature lasts much longer than the cold applied externally, but this time factor was subject to great variation.

The interactions between the splanchnic and peripheral circulation serves to explain why the nasal mucous membrane becomes anemic during these experiments. The autonomic status of the circulation of the abdominal and pelvic organs is opposed to that of the extraperitoneal organs and tissues. As a result of this relationship, the autonomic status of the respiratory mucous membrane corresponds to that of the skin. If the body is exposed to low temperatures, particularly in the absence of muscular activity, the skin becomes relatively ischemic owing to peripheral vasoconstricture. Since the autonomic orientation of the respiratory mucous membrane corresponds to that of the skin, they also become ischemic.

### Summary

In summarizing, one is impressed with the ingenious and complex mechanism of the nose. This mechanism functions in ordinary environments with remarkable efficiency. It is, however, affected adversely by any form of cold applied to the body, especially when not exercising, a consideration most important in the prevention of colds. The vasomotor activity of the nose varies not only with different environments and emotional factors, but also with the age and constitutional make-up of the individual.

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# The Successful Use of Sulfanilamide in the Treatment of Blackwater Fever

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■ Blackwater fever is not an unusual condition in the malarial districts, but to encounter a case in Northern Michigan, however, is quite surprising. This case presented several phases which seem unusual enough to warrant this report. Search of the medical literature reveals no reported cases which have been treated with the sulfanilamide group. Several reports on the use of these drugs in ordinary malaria have been recorded in the past three years. Hill and Goodwin have reported one hundred cases of malaria treated with sulfanilamide with excellent results.

Blackwater fever or malarial hemoglobinuria is generally considered to be one clinical manifestation or malignant form of malaria. Most authorities believe that the estivo-autumnal parasite is usually present. In this condition the red cells are dissolved or hemolyzed, and the hemoglobin is liberated into the blood stream. The destruction of red blood cells may be so extensive that the liver, spleen, and other organs that normally take care of the hemoglobin from worn-out or dead cells are unable to do so and the excess amount of hemoglobin is excreted by the kidneys in such quantities that the color of the urine becomes red, and may be in such quantity as to give the urine a black color—hence the term "blackwater."

The onset of blackwater fever generally begins with a chill, followed by a high temperature, great prostration, thirst, vomiting, abdominal distress, aching loins, and great tenderness over the acutely enlarged liver and spleen. The patient rapidly becomes jaundiced, and the urine that is passed varies in color from red to black. The red count and hemoglobin may drop rapidly to very low levels. Death occurs in about twenty per cent of the cases. Anuria is the most dreaded complication and the outcome is usually fatal.

No specific treatment has been proved to be of value. Quinine is usually withheld or given with caution as it may contribute to the hemolysis. Rest, good nursing care, parenteral fluids, and blood transfusions all are of value. Many drugs of questionable value are advised, such as —alkalies, adrenalin, caffeine sodium benzoate, atabrine, snake venom and neo-arsphenamine. No reports of the previous use of sulfanilamide have been found.

## Case Report

E. S., a thirty-six-year-old white woman, was admitted to Mercy Hospital, Cadillac, Michigan, on November 28, 1937, complaining of chills, fever, and passage of black urine. She had been a foreign missionary for eight years, going to French Equatorial Africa in 1929. She returned to the United States in 1931 for one year. From there she had gone to Paris, France, for a year's study. She had returned to Africa in 1934, remaining there until June, 1937, when she came back to America.

She had the first attack of malaria in Africa in 1930. She had taken 5 grains of quinine daily upon arrival in Africa and had continued quite faithfully. However, after neglecting this for a week she developed chills and fever in 1930. This lasted three days and was easily controlled with quinine. In December, 1934, she had another slight attack which responded quickly to quinine. One year later she had another mild attack of malaria. While on the boat returning to America in June, 1937, she again had chills and fever. Following this she took quinine, five grains daily, more or less irregularly for two months.

Other than these attacks of chills and fever, the patient noted no symptoms until three months before admittance, when she developed tinnitus and weakness. She was also told by her friends that they had noted a gradually increasing pallor of her skin.

In August, 1937, she had an attack of pain in the lower abdomen for which she was kept in bed for two months.

The present attack began on November 22, 1937, six days previous to admittance, with slight chills and fever, which persisted daily until November 27, 1937, when she had a severe chill and first noticed the passing of black urine. This had cleared up but the next day she had another chill with a temperature of 105 degrees and again passed dark urine. On admittance to the hospital that evening she had another chill and

complained of nausea and vomiting, extreme thirst, and pain in the right upper abdominal quadrant.

Inventory by systems revealed little of significance. There was no history of other previous illnesses. Menstruation had begun at sixteen. Her periods had been regular, occurring every four weeks and being moderate in amount until ten months ago, when they became profuse and occurred every three weeks with pain in the lower abdomen during menstruation.

*Physical Examination.*—On admittance examination revealed a rather thin, white woman of about thirty-five years of age, with marked pallor and a pale lemon yellow color of the skin and scleræ. She was evidently acutely ill although well oriented and coöperative.

Temperature 106.4 degrees. Pulse 110. Respirations 28. Her pupils reacted normally. Scleræ were icteric. The mucous membranes and conjunctivæ were very pale, without petechiæ. Mouth was normal. There was no thyroid enlargement. Her chest was clear and resonant throughout. The heart borders were well within normal limits but a systolic murmur was present at the apex and over the pulmonic area. Rhythm was regular, rate 110. The abdomen was soft and flat. The liver edge was felt one hand's breadth below the costal margin, was very tender, not nodular. The spleen was markedly enlarged and extended five inches below the left costal margin. There were no other masses or tenderness, or costovertebral tenderness. Pelvic examination revealed a nulliparous introitus, hymen intact; cervix pointing down and anteriorly was freely movable. No adnexal enlargement or tenderness. Neurological examination was negative.

Laboratory examinations of the blood on admittance were as follows: red blood count 890,000, white blood count, 4,300, hemoglobin 25. Smear of blood showed no malarial parasites. A differential count showed juveniles 4, stab 36, segmented 24, small lymphocytes 3, large lymphocytes 10, monocytes 19, degenerated cells 1, irregular lymphocytes 3. Red blood cells were swollen, with a few microcytes, a few hyperchromic and hypochromic cells. The icterus index was 100. Vandenberg reaction was indirect. Blood culture was negative.

*Course in Hospital (first three weeks).*—Twelve hours after admittance the temperature went up to 108.4 degrees axillary, but came down to 99 and 100 degrees for the following three days. Then she again had rigors with high fever nearly every day. The urine remained black. The red count was brought up by frequent blood transfusions but soon fell again to extremely low levels. Patient complained of abdominal distress, nausea, weakness, and palpitation. Delirium was quite marked after the severe rigors. On December 17, 1937, she appeared to be dying. She was cyanotic, comatose and pulseless at times. Her face and hands were edematous.

*Summary of Laboratory Work.*—Blood Kahn was negative. Icterus index 100. Agglutination tests for typhoid, paratyphoid and undulant fever were negative.

| Date | Red Blood Cells | Hemoglobin % | Highest Temperature | Chills | Color of Urine |
|---|---|---|---|---|---|
| 11-28-37 | 890,000 | 25 | 108.4 | x | black |
| 11-30-37 | 1,300,000 | 28 | 101.0 | | amber |
| 12- 1-37 | 970,000 | 26 | 101.8 | | amber |
| 12- 2-37 | 1,840,000 | 32 | 103.8 | x | black |
| 12- 3-37 | 1,550,000 | 30 | 103.8 | x | dark red |
| 12- 4-37 | 1,640,000 | 38 | 103.2 | x | black |
| 12- 6-37 | 1,310,000 | 32 | 106.2 | x | black |
| 12- 7-37 | 1,290,000 | 25 | 105.8 | x | pale red |
| 12- 9-37 | 1,200,000 | 21 | 102.0 | | straw |
| 12-11-37 | 1,330,000 | 25 | 103.8 | x | amber |
| 12-13-37 | 1,720,000 | 34 | 104.8 | xxx | black |
| 12-14-37 | 1,260,000 | 30 | 105.8 | xx | red |
| 12-16-37 | 870,000 | 16 | 102.8 | | black |
| 12-18-37 | 650,000 | 10 | 101.8 | | red |
| 12-18-37 | Prontosil started | .... | .... | .. | .... |
| 12-20-37 | 610,000 | 10— | 99.8 | | red |
| 12-22-37 | 860,000 | 10+ | 99.6 | | red |
| 12-24-37 | 1,530,000 | 35 | 100.0 | | amber |
| 12-26-37 | 1,790,000 | 37 | 99.2 | | straw |
| 12-28-37 | 1,630,000 | 38 | 98.6 | | straw |
| 12-30-37 | 1,850,000 | 40 | 98.6 | | straw |
| 1- 4-38 | 2,280,000 | 42 | 98.6 | | straw |
| 1- 8-38 | 2,340,000 | 46 | 98.6 | | straw |
| 1-12-38 | 2,000,000 | 47 | 99.0 | | straw |
| 1-24-38 | 2,810,000 | 50 | 98.8 | | straw |
| 1-31-38 | 3,070,000 | 53 | 98.0 | | straw |
| 2-13-38 | 4,080,000 | 60 | 98.0 | | straw |
| 2-25-38 | 4,100,000 | 64 | 98.0 | | straw |

Daily blood smears were negative for malarial parasites except on November 28, 1937, and on December 7, 1937, when estivo-autumnal organisms were found. Blood cultures were repeatedly negative. Blood sugar was 88 milligrams per 100 cubic centimeters. Blood non-protein nitrogen was 53 milligrams per 100 cubic centimeters. The feces were repeatedly negative for ova or parasites. The urine was consistently reddish purple or black in color. The red count and hemoglobin are recorded in Table I. The white count varied from 2,000 to 6,000.

*Summary of Treatment (first three weeks).*—Two thousand to four thousand cubic centimeters of intravenous saline and glucose were given daily. On November 30, 1937, atabrine was started and 1.5 grains given three times a day for fifteen doses. On December 2, snake venom in increasing doses was given daily. Intramuscular liver extract and ferrous sulfate with vitamin B were given daily. Cafeine sodium benzoate, 7.5 grains twice daily, and adrenalin m. X whenever needed for sixteen days. Quinine, 5 grains three times daily, was started on December 11, but discontinued after two days. Six thousand cubic centimeters of citrated blood from thirteen donors were given at intervals during the first three weeks. Cold wet packs were used for hyperthermia and external heat applied with the chills. Constant special nursing care was provided. A few doses of sodium thiosulfate were given intravenously. Nembutal was given for restlessness.

*Later Course.*—On December 18, the red count was 650,000 with a hemoglobin of 10. The urine continued to be reddish black. Because of the fact that the patient was obviously terminal and had failed to respond to any of the recognized forms of treatment, I decided to give sulfanilamide. This had been considered before but withheld because of the fear of further aggravating the severe anemia. Therapy with 20 cubic centimeters of prontosil every four hours was instituted with almost miraculous response. The temperature dropped to normal and remained normal thereafter, and all the previously described signs disappeared. In two days the patient became rational and was able to take sulfanilamide by mouth, this being given in doses of 15 grains four times daily for three days and then reduced to 10 grains three times daily. There was no more black urine, although it was discolored from the prontosil. The red count increased rapidly without any further transfusions. She was given ferrous sulfate with vitamin B in the form of hematinic plastules. The liver and spleen gradually diminished in size and the jaundice cleared up.

She continued to be nauseated, however, and developed attacks of severe pain in the right upper abdomen referred to the right shoulder blade which required frequent doses of morphine for relief. On December 29, x-rays showed non-visualization of the gall bladder after oral dye. A diagnosis of gall-bladder disease with stones was made. She was given dehydrocholic acid with atropine and a high fat diet for a week, but the attacks became worse on this regime. On January 19, 1938, her red count was up to 2,630,000 and hemoglobin 47. She was taken to the operating room and under nitrous oxide anesthesia the gall bladder was explored through a small subcostal incision. The gall-bladder wall was somewhat thickened; the mucosa had a strawberry appearance. It was filled with dark brown bile and contained six or eight faceted soft, brown gall stones. The stones were removed and the gall bladder was drained. It was felt that these stones were probably the result of the extreme concentration of blood pigments from the hemolytic anemia rather than the result of gall-bladder infection. Considering the general condition of the patient, a cholecystotomy seemed preferable to a cholecystectomy.

Her postoperative course was uneventful. She was up in two weeks and on February 13 she was discharged from the hospital. Her red count at that time was 4,080,000 with a hemoglobin of 60. She felt fine. She was instructed to take quinine, 10 grains daily, and continued to take ferrous sulfate.

She has been under observation intermittently since that time. There have been no recurrences of the symptoms of malaria or gall-bladder disease. In February, 1939, she again left for French Equatorial Africa to continue as a missionary, and several reports reveal that she is in good health.

## Comment

The interesting features of this case are the occurrence of blackwater fever, a tropical disease, in Northern Michigan, the unusually high temperature 108.4 degrees axillary, the extreme anemia, the dramatic response to prontosil and sulfanilamide in an obviously terminal patient, and the removal of blood pigment stones from the gall bladder.

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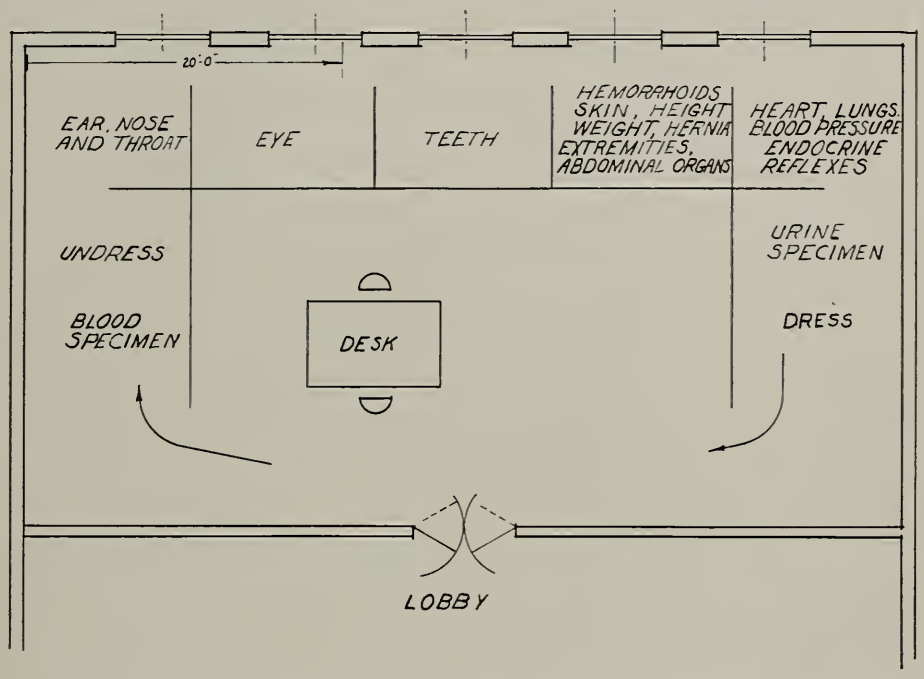
# Examination of Selectees as a Society Activity

The Tuscola County Medical Society has been conducting group examinations of registrants under the Selective Service Act as a Society activity. The manner in which these examinations are being conducted appears to be somewhat unusual and therefore worth while reporting.

Prior to May, 1941, the examinations for the Local Board had been done by three Caro physicians. With the death of one of these physicians, the two remaining found it impossible to examine enough men to fill the county's quota for induction into service. The members of the Local Board approached the officers of the Society and, after obtaining their approval, interviewed the individual members to ascertain their willingness to serve as examiners for the Board. The response was unanimous. The names of the younger members were then submitted by the Board to Governor VanWaggoner for approval; all names submitted were approved.

Because of his central location and proximity to the Draft Board office, the secretary of the Society was designated as the chief examining officer. The dentists of the county have cooperated splendidly, one working with each unit in a group examination; several have assisted more than once. The examining physicians were divided into three groups of four, each group acting as an examining unit. The secretary has acted as a sixth examiner with each unit.

The Medical Superintendent of the Caro State Hospital for Epileptics offered the use of the gymnasium of the institution recreation building as an examining center and the facilities of the institution laboratory for urinalyses. All blood specimens are sent to the Michigan Department of Health Laboratory for routine Kahn tests. Examining booths along the windowed side of the gymnasium are formed by suspending sheets from overhead wires. Each physician works in the same booth at all examinations. The accompanying diagram explains the physical setup. Registrants wait in the lobby until called for examination.




The secretaries of the Local Board and of the Society arrange the dates of examinations. The secretary of the Local Board sends the "Official Notice to Appear for Examination" to a group of between forty-five and fifty registrants. At the same time the secretary of the Society notifies the members of a unit that an examination will be held. The examining units work in rotation. Each unit completes its work in a half day and it has not been necessary for any unit to appear more often than once a month.

As each registrant enters the gymnasium, he is assisted in filling out the questions on the first page of the examination form. At this time a

psychiatric evaluation of the registrant is made. He then passes to the first booth. Here he disrobes and the blood specimen is taken. Carrying his examination blanks and clothes with him, he is examined in each booth in turn. At the last booth, a urinalysis is obtained and the blanks collected. Three male attendants from the institution have assisted with the taking of blood for Kahn tests, removal of impacted wax from ears, and the collection of urine specimens. As each examiner completes his part of the examination, he makes a penciled note in the margin, classifying that portion of the examination as IA, IB, or IV. He is familiar with the Selective Service standards for his particular examination and his notation is a valuable timesaver to the chief examiner in completing the forms when the results of the urinalyses and Kahn tests are available. The completed forms are returned to the secretary of the Local Board.

The members of the Local Board have been very enthusiastic over this plan. It allows them to consider large groups of registrants for final classification at one time and makes their meetings, with absence from their regular occupations, less frequent. Thus far, none of the physicians or dentists has objected to spending the time requested; their coöperation has been very gratifying to the Society officers. The percentage of rejections at the Army Induction Station has been low. Of the last group of thirty-nine sent to the Induction Station, there were five rejections. Three had been referred to the Medical Advisory Board and passed by that body. One was rejected because of "acute anterior urethritis (gonococcic) of three days duration." The fifth, a registrant with rheumatic heart disease, represents the only real failure of the examining group. Needless to say, this record of efficiency is pleasing to all concerned.

MSMS

## PLASMA TRANSFUSION ABOARD SHIP SAVES "KEARNY" CREW MEMBER'S LIFE

How blood plasma, donated by an unknown American through his local Red Cross chapter to the Army and Navy Blood Plasma Bank, was used on the torpedoed destroyer *Kearny* to save the life of a seriously injured sailor, is told in a statement issued by the United States Navy Department, November 4. While the destroyer was still limping into port, a series of three transfusions was performed with plasma flown from shore-based supplies by a patrol plane and parachuted into the water from where it was rescued and taken aboard the *Kearny*. The statement issued by the Navy Department follows in full:

"Blood plasma taken from the bank being raised by donations which citizens of the United States are making to the Navy through the American Red Cross was credited today with saving the life of Leonard Frontakowski, Chief Botswain's Mate, USN, one of the 10 men injured when the USS *Kearny* was torpedoed on the night of October 16-17.

"The plasma, delivered far at sea by a Navy patrol plane, was used in three transfusions which a Naval surgeon administered in a dramatic operation performed aboard the damaged destroyer as it limped to port after being hit by a German submarine.

"Frontakowski, whose home is at 370 Hamilton Ave., Norfolk, Va., was not injured in the torpedo attack itself, but was hurt seriously when struck by a lifeboat which was torn from its moorings and swept across the deck of the ship as the damaged destroyer rolled in the rough North Atlantic seas.

"The ship's 'sick bay' had been wrecked by the torpedo's explosion. However, Frontakowski was carried to the ship's after-dressing station where first aid was administered by an unidentified Pharmacist's Mate.

"Meanwhile, another destroyer was on its way to assist the *Kearny* and when she arrived 18 hours after the submarine attack, Lieutenant (junior grade) R. W. Rommell, Medical Corps, U. S. Naval Reserve, a resident of Oneida, New York, was transferred to the *Kearny* in a motor whale boat to attend the injured men.

"Soon after Dr. Rommell's arrival, a patrol plane, which had put out from a shore base, reached the scene and dropped a package of blood plasma, wrapped in waterproof covering, on the sea beside the second destroyer. It was recovered and taken aboard the *Kearny*.

"Dr. Rommell used the blood plasma to give Frontakowski three transfusions. The sailor's condition, which had been considered very grave, began to show steady improvement.

"Frontakowski is recovering at a service hospital in Iceland now and is believed to be out of danger.

"Surgeons at the Navy Department pointed out that the plasma used in saving Frontakowski's life far out in the North Atlantic may have come from a donor in any of several inland states, and emphasized the importance of everyone joining in the drive to provide the blood plasma needed to equip ships of the fleet.

"Approximately 20,000 donations have been made to the Red Cross, and of these 9,000 have been processed and turned over to the Navy and 6,000 to the Army. It is estimated that at least 100,000 units are required for each branch of the service to meet ordinary peacetime needs.

"Persons interested in making contributions to the blood bank are requested to contact chapters of the American Red Cross participating in the program."

Active blood collecting projects are now sponsored by Red Cross chapters in the following cities: Washington, Baltimore, Philadelphia, New York, Buffalo, Rochester, and Indianapolis. A number of other chapters are now completing plans for collection projects in their areas, the Red Cross announces.

# President's Page

## The Season's Greetings

My Sincere Wish to all members of the Michigan State Medical Society for a

MOST HAPPY HOLIDAY SEASON!

May the New Year bring an abundance of health and courage to each and every doctor of medicine so he may perform the daily tasks assigned to him and do his part in solving problems which face him individually and as a member of an important group.

Henry R Carstens

President, Michigan State Medical Society

# EDITORIAL

## MEDICAL PREPAREDNESS IN MICHIGAN

■ MICHIGAN is faced at once with the procurement of one hundred medical officers for the armed forces of the United States. That is not all. In the possible near future, the quota for Michigan will be seven hundred more medical officers. This amounts to about eighteen per cent of the practicing physicians in the state. In a medical society of one hundred members, eighteen of them may be needed to fill Michigan's quota.

The United States is developing a medical corps of over eleven thousand medical officers. This compares with some twelve hundred a very few years ago. At the present time the age limit for physicians with no army training is thirty-five years. Undoubtedly, many of the younger men will apply for commissions but it is questionable that there are eight hundred physicians in Michigan under thirty-five years who are available. It is probable the age limit will be raised.

In order to make the service attractive to the older and more trained men, the Preparedness Committee of the A.M.A. has been asked to recommend higher initial commissions for medical specialists and higher pay arrangements with more efficient use of present medical officers. (According to an administrative medical officer some of this inefficient use of the doctors in service is due to their own lack of executive ability.) An additional recommendation by the state committee is that certified specialists should be given initial rank of Major.

**A further activity of the state committee will be to prepare and arrange the collection of a questionnaire which will be filled out by each County Preparedness Committee. The data in this questionnaire will enable the state committee to have a comprehensive knowledge of the distribution and availability of physicians should a national crisis become apparent.**

Other aids for encouraging commissions of medical officers are requests to the hospital administrators that they encourage interns, residents, and staff members under the proper age to apply for commissions in the Medical Reserve Corps and that medical students be encouraged to seek appointments in the Medical Administrative Corps.

**There is, at present, an understanding between the Selective Service, the Military Forces and the colleges that any medical student, once accepted in a reputable medical college, may be commissioned in the Medical Administrative Corps and then will not be called to active duty until after completion of his medical education.**

The deans of the medical schools also have been asked to avoid the certifications to teaching positions of doctors under the age of thirty, and also to discontinue requesting their deferment in the draft.

A difficult problem and much labor await the Medical Preparedness Committee but they seem to have started the solution with a sound understanding of the needs and a desire for fair treatment to doctors of medicine.

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## YOU HAVE THE FACTS

■ A LETTER sent to each member of the Michigan State Medical Society on November 15, 1941, by the Executive Committee of The Council presented a very informative report on Michigan Medical Service.

Perhaps most important was the news that the Board of Directors of Michigan Medical Service has finally found a trained insurance man capable of managing the administration of the program. For many months contacts had been made but fulfillment was impossible for one reason or another.

Two paragraphs of this letter are especially worthy of note:

**"Surgery in the general population runs only 40 cases per 1,000 whereas surgery with Michigan Medical Service groups has been running to 139 cases per 1,000. This experience in the**

first six months of newly-enrolled groups, taxes severely the reserves of Michigan Medical Service but incidentally reveals that 3½ times more operations are performed under the M.M.S. program than are performed in the general population."

This surely demonstrates that the additional amount of service created under this budgeting plan should tend toward a more healthy population and an increase in the amount of preventive surgery.

The other paragraph to be quoted needs no comment. It is a sermon in itself.

**"It must be appreciated that Michigan Medical Service is a young corporation and that perfection can only be had through a process of evolution. Its initial development was occasioned by a consumer demand for a program protecting the low-income workers against catastrophic illness. This demand will have to be met; either by coöperative efforts of the medical profession, or by political or social agencies. Would a political or social program by consistent with the democratic practice of Medicine and preserve its tradition?"**

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## MERRY CHRISTMAS

■ In extending the greetings of Christmas to every member of the Michigan State Medical Society, the officers and councilors review with gratification the accomplishments of the past year. Organized medicine in Michigan has kept pace with scientific advancement, while at the same time meeting and solving its ever-increasing social and economic problems.

Looking to the year 1942, a period of even greater service by the medical profession to the citizens of Michigan is anticipated—a service developing better health and prosperity to all, epitomized in the sincere greeting, "A Happy New Year."

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### WRITE ON THYMUS TREATMENT

"Treatment of Successive Generations of Rats with Thymus Extract and Related Substances," a summary of two years' research in the anatomical laboratories of the Wayne University College of Medicine, is published in the current issue of the nationally circulated journal, *Endocrinology*. Prof. Warren O. Nelson and Instructor Albert Segaloff of the College staff are the authors.

The Wayne study was aided by grants from the Committee on Scientific Research of the American Medical Association and the Works Project Administration.

# You Are Going to Pay More Taxes

By Hazen J. Payette, LL.B.

*This article on Income Taxes is the first in a series of two written especially for* The Journal *of the Michigan State Medical Society by Mr. Payette, a member of the Detroit Bar, out of a wealth of experience with the Internal Revenue Code.*

ON September 20, 1941, at 12:15 p.m. E.S.T. the Revenue Act of 1941 became effective. While this was not a complete new act but merely amendments to the Internal Revenue Code, all payers of income tax in prior years will be affected by it as well as hundreds of thousands of persons who heretofore have escaped the payment of income taxes.

In attempting to comment on income taxes for 1941, I am mindful of the fact that additional tax acts will probably be passed either in 1941, or in 1942 and made retroactive to one's 1941 income. What these changes will be it is impossible to guess and therefore this article is based on the above mentioned Act. In addition, certain suggestions are made which might prove beneficial to one's tax position if acted upon this year.

The present Act is not the so-called "Administration Tax Bill" although it does contain some of its provisions. Numerous provisions were eliminated to expedite its passage with the promise that a subsequent bill would be introduced which would provide additional revenue. The present Act will yield slightly in excess of $3,500,000,000.

This discussion of the Act is directed primarily to the medical profession and will not touch on the new or increased corporation, excise and excess profits tax. In passing, however, it might be well to mention that material increases have been made in estate and gift taxes (in some instances the new estate taxes represent an increase of 424 per cent) and while the new rates on gift taxes do not become effective until 1942, the estate taxes will be collected as of the effective date of this Act.

Although the amendments to the Act affecting 1941 income are not numerous in comparison, they are vital in that they generously affect the amount of tax one will pay. Those changes can be summarized as follows:

(a) Integration of 10 per cent defense tax into basic surtax.

(b) Reduction of personal exemption for married persons from $2,000 to $1,500.

(c) Reduction of personal exemption for single persons from $800 to $750.

(d) Restriction in the allowance to the head of a family on the first dependent in certain cases.

(e) Increased surtax rates.

(f) Optional returns.

(g) Optional reporting of increment on U. S. Savings and Defense Bonds.

(h) Lowering of minimums on Information Tax returns.

### Who Must File a Return

The Act contains these provisions:

> The following individuals shall each make under oath a return stating specifically the items of his gross income—
>
> (1) Every individual who is single or who is married but not living with husband or wife, if having a gross income for the taxable years of $750 or over.
>
> (2) Every individual who is married and living with husband or wife—if (A) such individual has for the taxable year a gross income of $1500 or over, and the other spouse has no gross income; or (B) Such individual and his spouse each has for the taxable year a gross income and the aggregate gross income is $1500 or over.

Even though a single person may have the status of "head of the family" with one or more dependents, he would still have to file a return if his income was $750 or over; a married person having a gross income of over $1,500, who is maintaining a home for his wife and minor child or children would also have to file a return although in each instance no tax would have to be paid.

A husband and wife are still permitted to file either joint or separate returns. However, in every such instance where there are separate incomes a mathematical problem is presented and a decision must be reached as to which is the more economical. In making this decision, bear in mind that in joint returns the contributions, losses et cetera of one party may be used to offset the gains of the other. On the other hand, a joint return may bring one in the upper surtax brackets and result in a higher tax than would have been paid if individual returns were filed.

As an illustration of the application of the Act let us consider the potential report of a married physician, living with his wife, maintaining a household, who has two dependent children and whose items of income and deductions are as follows:

| | | | |
|---|---|---|---|
| *Income* | | | |
| Income from profession (earned income) | $6,000.00 | | |
| Dividends | 600.00 | | |
| Rents and royalties | 780.00 | | |
| Fully taxable interest | 100.00 | | |
| Gross income | | $7,480.00 | |
| *Deductions* | | | |
| Taxes | $ 482.00 | | |
| Interest paid | 82.00 | | |
| Losses from fire, theft, etc. (not capital losses) | 320.00 | | |
| Bad debts | 100.00 | | |
| Contributions | 110.00 | | |
| Total deductions | | 1,094.00 | |
| Net income | | $6,386.00 | |
| Credits against net income for *surtax* purposes: | | | |
| Personal exemption | $1,500.00 | | |
| Credit for dependents | 800.00 | | |
| | | 2,300.00 | |
| Surtax net income | | $4,086.00 | |
| Surtax (see surtax tables below) | | | $311.18 |
| * * * | | | |
| Net income | | $6,386.00 | |
| Credits against net income for *normal tax* purposes: | | | |
| Personal exemption | $1,500.00 | | |
| Credit for dependents | 800.00 | | |
| Earned income credit (10% of either earned income or net income, whichever is less) | 600.00 | | |
| | | 2,900.00 | |
| Normal tax net income | | $3,486.00 | |
| Normal tax (4% of $3,486.00) | | | 139.44 |
| Total normal and surtax | | | $450.62 |

Note that the amount subject to surtax is greater than that subject to normal tax. This is true because the earned income credit is one of the items not allowed as a deduction for surtax purposes.

It is possible under the Act to have a situation where the taxpayer will not be required to pay a normal tax but nevertheless must pay a surtax. For example, where a married man

with one dependent has an exemption of $1,900.00 and has an earned income of $2,100.00, his earned income credit added to his exemptions would total more than his income and he would therefore have no normal tax to pay; but since his earned income credit of $210.00 is not allowable for surtax purposes, he would be entitled to only $1,900.00 in exemptions and would therefore be required to pay a surtax on $200.00 which would amount to $12.00.

### Surtax Tables

Surtax tables as set up under the Act start at 6 per cent with the rate increasing rather abruptly. The rates up to and including $32,000.00 are as follows:

| If the surtax net income is: | The surtax shall be: |
|---|---|
| Not over $2,000.00 | 6 per cent of the surtax net income |
| Over $2,000.00 but not over $4,000.00 | $ 120.00 plus 9 per cent of excess over $ 2,000.00 |
| Over 4,000.00 but not over 6,000.00 | 300.00 plus 13 per cent of excess over 4,000.00 |
| Over 6,000.00 but not over 8,000.00 | 560.00 plus 17 per cent of excess over 6,000.00 |
| Over 8,000.00 but not over 10,000.00 | 900.00 plus 21 per cent of excess over 8,000.00 |
| Over 10,000.00 but not over 12,000.00 | 1,320.00 plus 25 per cent of excess over 10,000.00 |
| Over 12,000.00 but not over 14,000.00 | 1,820.00 plus 29 per cent of excess over 12,000.00 |
| Over 14,000.00 but not over 16,000.00 | 2,400.00 plus 32 per cent of excess over 14,000.00 |
| Over 16,000.00 but not over 18,000.00 | 3,040.00 plus 35 per cent of excess over 16,000.00 |
| Over 18,000.00 but not over 20,000.00 | 3,740.00 plus 38 per cent of excess over 18,000.00 |
| Over 20,000.00 but not over 22,000.00 | 4,500.00 plus 41 per cent of excess over 20,000.00 |
| Over 22,000.00 but not over 26,000.00 | 5,320.00 plus 44 per cent of excess over 22,000.00 |
| Over 26,000.00 but not over 32,000.00 | 7,080.00 plus 47 per cent of excess over 26,000.00 |

These tables continue up to $5,000,000.00 and those persons having an income over that figure are required to pay a surtax of $3,723,780.00 plus 77 per cent of the excess over $5,000,000.00.

### The Optional Return

The optional return was designed to simplify the filing of returns for the thousands of new taxpayers this year. While it is an arbitrary method, it is assumed that the use of this return will result in the filing of fewer falsified returns, as the deduction allowed, in addition to the personal exemptions and the credit for dependents, is approximately 10 per cent.

The use of this form is restricted to those having a gross income of $3,000.00 or less and whose income "consists wholly of one or more of the following: Salary, wages, compensation for personal services, dividends, interest, rent, annuities, or royalties.". In the tables accompanying this form, a specific tax is listed for gross incomes from $750.00 to $3,000.00 with each bracket of $25.00 paying a different tax.

A professional man would not be permitted to deduct any items of expense, were he to use the Optional Return, so a thorough explanation here would merely waste valuable space. However, I do wish to point out that should a husband and wife have separate incomes, one would be permitted to file the regular form while the other filed the optional form. If this were done, each person would be considered as a single person and would therefore be entitled to a personal exemption. The credit for dependents would then be taken by the person providing support for same.

### Capital Assets

The law as to the acquisition and disposition of Capital Assets has not been changed. However, there has been some confusion as to the application of short term losses and for that reason the procedure is deemed worthy of comment. The rule on short term losses is that they may be deducted to the extent of short term gains for the same year. If one's short term losses exceeded his short term gains in the 1940 return, such losses may be deducted from the short term gains in 1941 and such deduction is only limited by the taxpayer's 1941 net income.

It might be well to point out that among the numerous suggested changes, several were proposed affecting Capital Assets. While no definite information is available, it is assumed by many that there will be changes in the manner in which profits on "long term" and "short term" gains are taxed. With this in mind, a thorough study of one's securities is indicated. The taxpayer should prepare at this time to take advantage of those deductions which might not be available in future. Examine the advisability of

disposing of those securities which are about to pass from one time bracket to another. It may be advisable to dispose of certain assets at a profit to offset certain losses incurred during the year. As it is possible that the new tax bill may not permit the deduction of short term losses incurred in the preceding year, it might be advisable to dispose of certain assets at a profit in order to absorb losses you have incurred during this year. Action must be taken before the end of the taxable year so that full advantage may be obtained. Adversely, if one is planning certain decorations or repairs which would come under the heading of "Business deductions" it might be well to wait until next year. Naturally, the same would hold true for business expenses.

### Deductions

In discussing deductions I assume that the taxpayer is familiar with the fact that the usual professional expenses are deductible. These are many. To enumerate them would take several paragraphs.

While equipment is generally considered as a capital asset and the taxpayer is only permitted to take depreciation on it, this is not true of those numerous items which must be constantly replaced. Magazines in the waiting room, malpractice insurance, dues in professional societies, expense of attending professional conventions, scientific journals, and the cost of maintenance of an automobile to the extent to which it is used in carrying on a profession are items of business deduction. Contrasted to the rule that business expenses are deductible, the Treasury Department has ruled that the cost of uniforms of surgeons and nurses as well as their cost of laundering, is not deductible!

A good rule to follow in deciding deductions for business expense: If the expense is incurred because it is essential to a profession or if it is required or expected of the physician in order that he may receive his compensation, it is deductable. However, if it is primarily connected with one's living, family or personal welfare, regardless of whether it may subsequently benefit one in his profession, it may not be deducted.

A doctor who uses part of his home as an office may deduct a proportionate share of the expense for heat, light, repairs, depreciation, insurance, cleaning service, et cetera. This apportionment may be on the basis of use, ratio of rooms used, or ratio of area. As no definite rule has been set, the merits in each case will govern.

717 Ford Building,
Detroit, Michigan

*(Part II will appear in the January issue)*

**ADVANCED COURSE IN SURGICAL ANATOMY**
**at the**
**UNIVERSITY OF MICHIGAN MEDICAL SCHOOL**

Second Semester—February 12 to June 4, 1942. Thursday, 1:00 to 10:00 P. M. each week. Professor Rollo E. McCotter.

Dissection of specific regions of the body to refresh previous knowledge and as preparation for surgical specialties or investigative work. If time permits and suitable material is available, the study may be extended to the microscopical and developmental anatomy of the region. Informal lecture the first part of the afternoon followed by dissection of the part under consideration. Graduate or postgraduate credit can be arranged. Fee $25.

For further information, address:

**Department of Postgraduate Medicine**
**University of Michigan**
**Ann Arbor, Michigan**

# CORONER ACTION REQUIRED IN ALL CASES NOT SEEN BY PHYSICIAN DURING THIRTY-SIX HOURS PRECEDING DEATH

**Attorney General's Opinion to State Board of Embalmers and Funeral Directors**

We have your recent letter in which you ask for a construction and clarification of the meaning of Section 19, Chapter XIII, of the Code of Criminal Procedure (Act 175, P.A. 1927; Section 17421, C. L. 1929; Section 28.1187, Mich. Stat. Ann.) which reads:

"It shall be the duty of any physician and of any person in charge of any hospital or institution, or of any person who shall have first knowledge of the death of any person who shall have died suddenly, accidentally, violently or as the result of any suspicious circumstances or without medical attendance up to and including at least thirty-six hours prior to the hour of death, or in any case of death due to what is commonly known as an abortion, whether self-induced or otherwise, to immediately notify the coroner of the death. It shall be unlawful for any undertaker, embalmer or other person to remove any body from the place where such death occurred, or to prepare same for burial or shipment, without first notifying the coroner and receiving permission to remove the body."

We refer you to a former opinion of this department (1933-34 O.A.G. 166) which discusses the history and purpose of this statute in detail. The apparent purpose of the statute is to assist in the discovery of crime resulting in death and to provide a method for determining the cause of death in all doubtful cases. Without repeating what was said in that opinion, we concur in the conclusion that this statute requires the action of a coroner in all cases of death where a physician has not seen the deceased during the last thirty-six hours preceding the hour of death.

We also direct your attention to Section 8 of Act 343, P. A. 1925 (Section 6580, C. L. 1929; Section 14.228 Mich. Stat. Ann.) which provides in part:

"In case of any death occurring without medical attendance it shall be the duty of the undertaker or person acting as such to notify one of the county coroners, or a justice of the peace acting as coroner, who shall investigate or hold an inquest as the circumstances require and shall certify as to the cause of such death on the death certificate and shall sign the same officially, as coroner or acting coroner. * * * "

You comment that:

"An extremely large proportion of deaths are due to such chronic disorders as cancer, heart ailments, et cetera. In such cases where medical attention has been provided and adequate diagnosis has been made, it is seldom that the physician is in actual physical attendance during the thirty-six hours immediately preceding death. Does this law require that such cases shall be referred to a coroner? We feel that they should not."

We cannot concur in your conclusion as it seems possible that in some cases of this sort some other cause of death might have intervened within the final thirty-six hours of the decedent's lifetime; for example, one suffering from such an ailment might be the victim of euthanasia, might commit suicide, or might die of some cause entirely unrelated to the previously diagnosed ailment. The fundamental purpose of the statute in question requires the action of a coroner in such cases so as to ascertain definitely the cause of death and aid in detecting crime.

You further comment:

"There is ample reason to believe that a physician whose first call occurs within this thirty-six hour period may not have sufficient time or information to make a proper diagnosis and, therefore, should be required to refer the case to a coroner."

In such cases the statute permits, and indeed in some cases requires, the attending physician to notify the coroner.

You present this further question:

"Whether a person who died directly as the result of an accident, but a year after such accident actually occurred, would be considered to have died 'accidentally' within the meaning of the above act."

The word "accidentally" must be read in connection with the preceding language and meaning must be given to the entire phrase "any person who shall have died suddenly, accidentally, or violently." Reading it in this way, it is clear that it does not refer to a person who dies as a *result* of an accident after the lapse of a year or any other extended period of time. In the immediately following phrase, the statute refers to "the result of any suspicious circumstances," and had the legislature intended the meaning, it no doubt would have used the phrase "the result of an accident."

It is our opinion that the word "accidentally" must be given its usual dictionary meaning of a sudden and unforeseen event.

Very truly yours,

HERBERT J. RUSHTON
*Attorney General.*

No. 20313 of
July 7, 1941.

# YOU AND YOUR BUSINESS

## THE STATE OF WASHINGTON SOLVES ITS STATE-MEDICINE THREAT

According to *Northwest Medicine,* a limited form of state medicine was inaugurated in the state of Washington last autumn by the passage of an initiative bill by a majority of 100,000 votes favoring an old-age pension measure which became effective April 1. This bill provides a pension of $40 per month for all citizens who have attained the age of 65; one section of the bill provides for free choice of doctor and dentist from legally-qualified practitioners. The setup places the medical and dental care under a State Medical-Dental Board, including four physicians, two dentists and one nurse, with a local board in each of the thirty-nine counties comprising two physicians, one dentist and a representative of the County Welfare Department.

"When the actual care of patients came under consideration," according to *Northwest Medicine,* "there was only one available means of dispensing this service. It was realized that the existing Medical Service Bureaus, with their experience standing over a period of years, could immediately administer the new service, and the care was placed under these organizations, thus eliminating lay supervision of medical service which has been a threatened menace whenever state medicine has been under consideration."

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**MSMS Convention, September 22, 23, 24, 25, 1942**
**—Grand Rapids—**

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## ANNUAL COUNTY SECRETARIES' CONFERENCE

The conference of county medical society secretaries will be held at the Olds Hotel, Lansing, Sunday, January 25, 10:30 a.m. to 4:00 p.m.

As in the past, this conference will become a joint meeting, in the afternoon, with the state and county health officers of Michigan.

An unusually interesting program is being developed, including a first-hand account of civilian defense in England by Chief Daniel Deasy of the New York Fire Department, now assigned to the Office of Civilian Defense, Washington, D. C.

All members of the Michigan State Medical Society will be welcomed at the County Secretaries' Conference; particularly, the presidents and secretaries of county medical societies are urged to attend.

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**MSMS Convention, September 22, 23, 24, 25, 1942**
**—Grand Rapids—**

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## APPRECIATION TO MICHIGAN LEGISLATURE AND THE GOVERNOR

The House of Delegates of the Michigan State Medical Society unanimously adopted the following resolution at the 76th Annual Meeting of the State Society in Grand Rapids:

RESOLVED, That the House of Delegates of the Michigan State Medical Society, in session September 16, 1941, place on its minutes an expression of appreciation to the members and the officers of the Michigan Legislature, and to His Excellency, The Governor, for the courteous reception extended to the representatives of the medical profession and for the thoughtful consideration they have given medical and public health measures that have come before them this year.

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**MSMS Convention, September 22, 23, 24, 25, 1942**
**—Grand Rapids—**

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## "ADVANCED FIRST-AID FOR CIVILIAN DEFENSE"

An informative brochure with the above title issued by the American Red Cross is obtainable, together with a copy of "Emergency Medical Service for Civilian Defense," by writing the Office of Civilian Defense, Washington, D. C., attention of George Baehr, M.D., Chief Medical Officer. No charge is made for these booklets.

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**MSMS Convention, September 22, 23, 24, 25, 1942**
**—Grand Rapids—**

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## KEEPING OUT OF TROUBLE

Not every doctor . . . who gets tangled up with the law deserves to be sued. One of the best ways for a doctor to keep out of trouble is to see to it very carefully that he does nothing which brings him within the scope of those who merit

damage suits against them, for if he is careful to observe this precaution he is likely to be rewarded with a long and honorable career in the practice of medicine without the humiliation, embarrassment and (sometimes) great loss occasioned by a malpractice suit.

*Humphreys Springstun, of the Detroit Bar. Doctors and Juries. P. Blakiston's Son and Co., Inc. 1935.*

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**MSMS Convention, September 22, 23, 24, 25, 1942**
**—Grand Rapids—**

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## EMERGENCY NEEDS FOR NARCOTICS

The Bureau of Narcotics, Washington, D. C., urges physicians to keep their narcotic purchases to a minimum. If a doctor's average use is 100 tablets a year, the Bureau suggests that he do not keep 500 on hand, as all reserve stocks must be readily available for defense purposes.

While no shortage of narcotics is to be feared, excessive buying and over-stocking by practitioners and hospitals should be avoided, according to the Bureau. The importance of keeping the country's reserve supplies of narcotics in the hands of manufacturers and wholesale dealers, where they are available for distribution to those localities in which they may be most needed, is self-evident. Drugs which have passed on to the dispensing groups of registrants (practitioners and hospitals) become "frozen" in that their use has become restricted to the particular locality and they are no longer available for distribution to other areas where emergency needs may arise.

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**MSMS Convention, September 22, 23, 24, 25, 1942**
**—Grand Rapids—**

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## FEDERAL GRANT AIDS PUBLIC-HEALTH NURSING

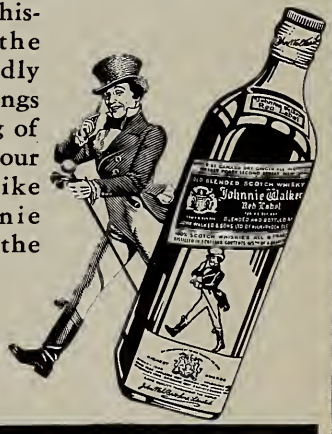
To aid in training graduate nurses specializing in public-health nursing, Mrs. Dorothy Stoddard, who for the past three years has served as a supervising nurse in Eaton County under the W. K. Kellogg Foundation plan, has been assigned to the staff of the department of nursing at Wayne University for one year under terms of a grant to Wayne from the Surgeon-General of the United States.

Her appointment is part of a general program, aided by the Surgeon-General's department, to expand Detroit's nurse-training facilities to aid the defense program. Sums totaling $52,190 are being administered by Wayne under the program.

Mrs. Stoddard, a graduate of the University of Minnesota School of Nursing and of Columbia University, will develop new field-work facilities for public-health nursing students, advise students in various problems, and coördinate field experience with the University program.

Did you know Johnnie Walker is a duet?

Johnnie Walker *has* to be two people. For the friendly gentleman identifies both 12-year-old Black Label and 8-year-old Red Label Scotch whisky. Each has the smooth, friendly flavour that brings a special feeling of satisfaction to your taste. You'll like mellow Johnnie Walker, from the very first sip.



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# MICHIGAN'S DEPARTMENT OF HEALTH

HENRY A. MOYER, M.D., Commissioner, Lansing, Michigan

## SMALLPOX OUTBREAK EXPOSES INDUCTION CENTER

Smallpox traced to a Port Huron case resulted in widespread exposures in Lapeer, St. Clair and possibly other counties in October. One patient was a rejected draftee who exposed the Army induction station in Detroit. Another was a postmaster, others were school children and factory workers.

When the case of the rejected draftee was reported after the State Health Department had been asked to investigate reports of smallpox at Allentown in St. Clair County, Selective Service sent warnings to reception stations at Fort Custer and Camp Grant. Out of 276 men in the Detroit induction station on October 16, 203 were accepted and sixty-two were rejected. These men came from thirteen draft boards in St. Clair, Oakland, Washtenaw and Wayne counties. Local health officers notified the sixty-two men of the exposure, offering vaccination and ordering quarantine where necessary.

Mass vaccinations were provided in some Thumb communities as a result of the outbreak.

MSMS

## 1941 BIRTHS SET NEW RECORD

Births in Michigan will exceed 100,000 for an all-time record this year. State Health Department figures indicate a total of 107,000 compared with the 1927 record of 99,940.

Last year, Michigan births totaled 99,106 and infant deaths were slightly more than 4,000. In spite of the increase in the number of births this year, the number of infant deaths will probably be only a little more than the 1940 total. Willingness of more mothers to visit their doctors early in pregnancy is lowering the number of infant deaths. In 1930, when the number of births was about the same as the 1940 total, the number of infant deaths was greater by more than 2,000.

MSMS

## KELLOGG GRANT AIDS VIRUS RESEARCH

Virus research carried on in the Michigan Department of Health laboratories will be aided by new mechanical and electrical apparatus which will separate pure viris. The equipment will be purchased on a $7,000 grant from the W. K. Kellogg Foundation and will include an air-driven ultracentrifuge and an electrophoresis apparatus.

Under the terms of the Kellogg grant, investigations of diarrhea of newborn infants will be one of the first studies carried on when the specially-built equipment is ready for use.

MSMS

## NEW WATER SUPPLY PROMPTS DENTAL SURVEY IN ESCANABA

Escanaba's change of water supply from a bay of Lake Michigan to new deep wells may mean a future reduction in dental decay among the city's children.

The well water contains five-tenths of one part of fluorides per million parts of water. For this reason, a long-time survey is being undertaken to show the prevalence of tooth decay in children who have known only the old water supply, which is free of fluorides, and by comparison the prevalence of decay in children who use only the new well water. The survey is being made by dentists from the United States Public Health Service, the University of Michigan School of Dentistry and the Michigan Department of Health.

The survey will be similar to one recently made in eight suburbs of Chicago where it was found that children living in five communities where the water supply contained very small amounts of fluorides had only a half or third as many cavities in their teeth as children in the communities taking their water from Lake Michigan which is free from fluorine. Nearly 3,000 children from 12 to 14 years old were examined.

The Escanaba study is regarded as an ideal experiment. In the same town and in the same families, it will allow a comparison of dental health in children who have never had fluorine in their drinking water, and in children who have never known any other drinking water but the new supply with flourine in it.

Studies have shown that the effect of the fluorides (or something associated with them) occurs only when the teeth are being formed—from birth to eight years for all teeth except wisdom teeth and up to 14 years of age for the wisdom teeth. Adults starting to use the water are not affected, but when once built up in children, the protection in the teeth seems to be lasting.

MSMS

## WHOOPING COUGH HIGHEST IN FIVE YEARS

Whooping cough is more prevalent in Michigan now than it has been in the last five years and parents are being urged to have their family physician give vaccine protection to babies and small children.


**Forgotten Charges...??**

Do your bank deposits reflect ALL the work you do on EACH and EVERY case . . . or are there unseen leaks along the line? You can eliminate the hazards of hit-and-miss records when you use the DAILY LOG. It's REAL protection against *forgotten charges* . . . simplified, concise, complete—all in one neat volume.

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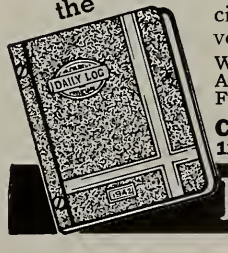


WRITE—for illustrated booklet "The Adventures of Dr. Young in the Field of Bookkeeping."

**COLWELL PUBLISHING CO.**
126 University Ave., Champaign, Ill.

**DAILY LOG**

# ✶ COUNTY AND PERSONAL ACTIVITIES ✶

**100 Per Cent Club for 1942**—Muskegon County has certified 1942 dues for all of its 81 members. Congratulations to Muskegon County.

* * *

**The Michigan Society for Crippled Children, Inc.,** held its 20th Annual Convention in Saginaw on November 6 to 8, 1941. L. Fernald Foster, M.D., Bay City, Secretary of the Michigan State Medical Society, was on the program discussing "Camps for Crippled Children."

* * *

**The Dr. Max Ballin Memorial Lectures** (Ninth) were held on Wednesday, November 26, 1941, at the Detroit Institute of Arts. "Disturbances of Physiologic Function in Pancreatitis and Their Recognition" was presented by Mandred W. Comfort, M.D., Rochester, Minnesota; and "Surgical Aspects of Acute Pancreatitis" by Robert Elman, M.D, St Louis, Missouri.

* * *

**Michigan representatives** to the American Medical Association Secretaries' Conference of November 14-15 were Henry R. Carstens, M.D., President; A. S. Brunk, M.D., Chairman of The Council; L. Fernald Foster, M.D., Secretary; Roy Herbert Holmes, M.D., Editor; Wm. J. Burns, Executive Secretary; and J. L. Leet, Assistant Executive Secretary.

* * *

**"Heroes in Medicine,"** a dramatized radio program, is being recorded under the auspices of the Radio Committee of the Michigan State Medical Society and will be distributed soon to all out-state radio stations coöperating with the Committee this year in presenting medical broadcasts. This interesting and progressive change in the radio program sponsored by the MSMS Radio Committee should insure a large listening audience throughout the state.

* * *

**Liberalization** of Civil Service Examinations for nurses has been announced by the United States Civil Service Commission. Persons over the age limit and those who cannot meet the physical requirements may apply for the examination if they meet all other requirements of the announcement. Persons applying under these provisions, if found otherwise eligible, may be appointed for temporary duty ONLY, for the duration of the emergency in the absence of qualified eligibles.

* * *

**Urology Award**—The American Urological Association offers an annual award "not to exceed $500.00" for an essay (or essays) on the result of some specific clinical or laboratory research in urology. The amount of the prize is based on the merits of the work presented, and if the committee on Scientific Research deem none of the offerings worthy, no award will be made. Competitors shall be limited to residents in urology in recognized hospitals and to urologists who have been in such specific practice for not more than five years. Essays shall be in the hands of the Secretary, Clyde L. Deming, M.D., 789 Howard Avenue, New Haven, Connecticut, on or before April 1, 1942.


*For the local Treatment of Acute Anterior* **Urethritis**

(DUE TO NEISSERIA GONORRHEAE)

**SILVER PICRATE***

*Wyeth*

*A complete technique of treatment and literature will be sent upon request*

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*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

Silver Picrate, Wyeth, has a convincing record of effectiveness as a local treatment for acute anterior urethritis caused by Neisseria gonorrheae.[1] An aqueous solution (0.5 percent) of silver picrate or water-soluble jelly (0.5 percent) are employed in the treatment.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

**JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA**

**A. C. Furstenberg, M.D.,** Ann Arbor, is author of "The Parotid Gland" which appeared in *The Journal of the American Medical Association* issue of November 8, 1941.

"The Surgical Treatment of Hypertension: II. Comparison of Mortality Following Operation with That of the Wagener-Keith Medically Treated Control Series" is the title of an article appearing in the *JAMA* issue of November 1, 1941, by Ward Wilson Woods, M.D., and Max Minor Peet, M.D., Ann Arbor.

* * *

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Davis & Geck, Inc., Brooklyn, New York
R. B. Davis Sales Company, Hoboken, New Jersey
DePuy Manufacturing Company, Warsaw, Indiana

The above ten firms were exhibitors at the 1941 Convention of the Michigan State Medical Society and helped make possible for your enjoyment one of the outstanding state medical meetings in the country. Remember *your friends* when you have need of equipment, medical supplies, appliances or service.

* * *

**Mr. Charles H. Swift,** chairman of the board of Swift & Co., recently announced the establishment of a series of fellowships for research in nutrition. The fellowships provide for special research to be undertaken in laboratories of universities and medical schools with funds which the company has set aside as grants in aid, beginning November 1, 1941. The fellowships will be for one year but may be renewed where the project warrants it. Any fundamental study of the nutritive properties of food or the application of such information to improvement of the American diet and health will be eligible for consideration for a grant, according to Dr. R. C. Newton, vice-president in charge of the company's research laboratories, who will coordinate the program.

* * *

**The Michigan Pathological Society** held its October meeting in Detroit on October 18, 1941, at Wayne University College of Medicine and at Receiving Hospital. The program consisted of a seminar on "Primary Tumors of the Brain" conducted by Gabriel Steiner, M.D., Professor of Neurology and Neuropathology at Wayne University College of Medicine. Eighteen typical cases of brain tumor with histories, operative and autopsy findings were presented by Doctor Steiner. Forty-seven physicians were in attendance.

The Annual Meeting of the Society will be held in December at the University Hospital, Ann Arbor, where the Society will be the guests of C. V. Weller, M.D., and his staff in the Pathological Department. The program will consist of the showing of a motion picture recently taken by W. M. German, M.D., on his trip through South America, which is entitled "Columbia South of Panama." "Problem Cases" will also be discussed by members of the Society.

* * *

### CONVENTION ECHOES

2,117 persons were registered at the 76th Annual Meeting of the Michigan State Medical Society (not including the members of the Woman's Auxiliary).

| | |
|---|---|
| Physician-members | 1,216 |
| Guests (mostly M.D.'s from other states) | 463 |
| Interns and Residents | 154 |
| Exhibitors | 284 |
| Grand Total | 2,117 |

The 1,216 members of the MSMS who registered at the Grand Rapids Convention represented the following specialties, according to a breakdown of the

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Over 200 office secretaries of members of the Michigan State Medical Society attended the Symposium on the Business side of Medicine, held in Grand Rapids September 16.

Miss Winona Kullgren of Muskegon, Secretary to Leland E. Holly, M.D., was the lucky winner of the attendance prize.

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Governor M. D. Van Wagoner was honor guest at the Smoker of the Michigan State Medical Society held in the Pantlind Hotel Ballroom, September 18.

# CORRESPONDENCE

Michigan State Medical Society
Lansing, Michigan
Dear Secretary Foster:

A letter from Douglas, Barbour, Desenberg and Purdy under date of August 21, 1941, apprising me of my being released from law suit, has relieved me of much anxiety of the possible outcome and I appreciate greatly the protection afforded me by our Society.

I am more than ever convinced of the great advantages derived from professional association in organized effort of all groups to be of benefit to their members.

Sincerely,
R. Milton Richards, M.D.
Detroit.

Oct. 16, 1941.

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To the Michigan State Medical Society.
Gentlemen:

At the request of the Board of Directors of the Kent County Medical Society, I am writing to commend the State Society and its committees which made the recent State Medical Convention such a decided success.

We physicians of Grand Rapids appreciate having the Convention in our city, and many of us hope the Council of the Michigan State Medical Society decides to return to Grand Rapids and that the Kent County Medical Society may play a greater part in helping your committee on arrangements and entertainment.

Sincerely,
Frank Doran, M.D., *Secretary*
Oct. 17, 1941 Grand Rapids.

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Secretary, MSMS
Lansing, Mich.
Dear Doctor:

I wish and am indeed very happy to express my appreciation to the MSMS for the very real service it has given me. It is very gratifying, to know that someone is "batting" for you when one is forced to the side lines.

I am sure that if the few doctors who are not members of the MSMS knew what they were missing, all the king's horses could not keep them out of the MS MS.

Thank you very much for all you have done for me.

S. M. Lewis, M.D.
Oct. 21, 1941. Ferndale.

# IN MEMORIAM

**L. F. Laverty** of Bay City was born in Bay City, Michigan, in 1895 and was graduated from Harvard Medical School in 1927. Breaking into his medical education, he left school during the World War to be a pilot in the naval air corps. Following the war he finished at Harvard and later interned at the Santiago County Hospital, California. He returned to Bay City last spring from San Clemente, California, where he had been practicing. Doctor Laverty met his tragic death in an automobile accident on October 30, 1941.

**Frederick W. Munro** of Detroit was born in Toronto, Ontario, June 11, 1899, and was graduated from the University of Toronto in 1924. During 1924 and 1925 Dr. Munro interned at the Hospital for Sick Children in Toronto. Following residency, he spent one year at Long Island Hospital, Boston, and one year as resident in pediatrics at the hospital for sick children, Detroit. Since 1928 he practiced in Grosse Pointe and latterly in his own office building at 16840 Kercheval Avenue. He was a Diplomate of the American Board of Pediatrics, as well as being affiliated with many medical and civic organizations. Dr. Munro died September 15, 1941.

**Arthur E. Owen of Lansing** was born in Grand Blanc on October 6, 1883, and was graduated from the Wayne University Medical School in Detroit in 1907. Dr. Owen studied in London, Vienna and Berlin. In 1925 he went abroad for a second time and took postgraduate work at Paris and London. Dr. Owen was a captain in the medical corps during the World War, and was a major in the medical reserve corps. He was a member of the Michigan Commandery, Military Order of Foreign Wars. In Lansing, he was prominent in civic and fraternal affairs and was a fellow of the American College of Surgeons and a member of the Southern Michigan Triological Society. He died October 8, 1941.

## RESOLUTION TO ENCOURAGE MEDICAL COMMISSIONS

The following resolution, adopted by the MSMS Medical Preparedness Committee, was approved by the Executive Committee of The Council of the Michigan State Medical Society on November 13, 1941:

WHEREAS, A shortage of medical officers in the United States Army and other Services exists at the present time; and

WHEREAS, Younger doctors of medicine seem reluctant to apply for commissions in the United States Army and other Services; and

WHEREAS, The above conditions are due to certain inadequacies and inefficiencies which do not make the Service attractive; now therefore be it

RESOLVED, That, in order to encourage requests for medical commissions, in the United States Army and other Services, prompt consideration be given to the following important matters:

1. That certified medical specialists be given initial commissions, not lower than the rank of Major;
2. That more rapid advancement in rank be provided for medical officers;
3. That special ratings with higher pay schedules be provided for medical officers;
4. That doctors of medicine be restricted to medical work, eliminating nonprofessional duties;
5. That more efficient use be made of the services of present medical officers; i.e., limiting them to professional duties and keeping them sufficiently occupied therewith.

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MEDICINE—Two Weeks' Intensive Course in Internal Medicine, and Two Weeks' Course in Gastro-Enterology will be offered twice during the year 1942, dates to be announced. One Month Course in Electrocardiography and Heart Disease every month, except December.
FRACTURES & TRAUMATIC SURGERY—Two Weeks' Intensive Course will be offered four times during the year 1942, dates to be announced. Informal Course available every week.
GYNECOLOGY—Two Weeks' Intensive Course will be offered four times during the year 1942, dates to be announced. Clinical and Diagnostic Courses every week.
OBSTETRICS—Two Weeks' Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.
OTOLARYNGOLOGY—Two Weeks' Intensive Course will be offered twice during the year 1942, dates to be announced. Clinical and Special Courses starting every week.
OPHTHALMOLOGY—Two Weeks' Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.
ROENTGENOLOGY—Courses in X-ray Interpretation, Fluoroscopy, Deep X-ray Therapy every week.
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## READING NOTICES

### SCIENTISTS MEET ON APPLE RESEARCH

The first major conference ever held on apple-use research met in Washington on October 20, 1941. Dr. M. L. Wilson, chairman of the special committee on apples in the U. S. Department of Agriculture, presided. The purpose of the conference was to review the work done to date on apples and to map out a large scale program of future study and investigation. Dr. Ira A. Manville, director of the Nutrition Research Laboratory, University of Oregon Medical School, presented the apple research work he had conducted during the past five years.

Dr. Lydia Roberts of the University of Chicago, said "We feel that apples are one of the most valuable foods even though we may not be able to explain just why. Everything is to be gained from research and I urge that it be done."

Among the leading authorities in the field of nutrition and food research present, the Department of Agriculture was represented by Dr. Louise Stanley and members of the Bureau of Home Economics research staff; Dr. J. T. Jardine in charge of experiment stations; Dr. E. C. Auchter, chief of the Bureau of Plant Industry. Others who attended included Dr. L. A. Maynard of Cornell University, chairman of the Fruits Committee of the National Research Council, Dr. A. R. Olpin, director of the Research Foundation and Dr. J. H. Gourley, chief of Horticulture, Ohio State University.

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### WHY MEAD, JOHNSON & COMPANY CO-OPERATES WITH THE COUNCIL

Voluntarily Mead Johnson & Company markets only Council-accepted products because they have faith in the principles for which the Council on Pharmacy and Chemistry (and the Council on Foods) stands.

They have witnessed the three decades during which the Council has brought order out of chaos in the pharmaceutical field. For over thirty years it has stood —alone and unafraid—between the medical profession and unprincipled markers of proprietary preparations.

The Council verifies the composition and analysis of products, and substantiates the claims of manufacturers. By standardizing nomenclature and disapproving therapeutically suggestive trade names, it discourages shotgun therapy and self-medication. It is the only body representing the medical profession that checks inaccurate and unwarranted claims on circulars and advertising as well as on packages and labels.

---

### "PETROLAGAR" NOW "PETROGALAR"

A change in the spelling of the name "Petrolagar" to "Petrogalar" has been announced by the Petrolagar Laboratories. The change is being made in both the product name and corporate name.

Company officials, while pointing out that the adoption of the new spelling does not affect the formula or quality of the product in any way, said that they considered the change advisable to avoid any possible misconception as to the nature of the product.

"Because it has never been the intention of the company to imply that agar-agar was used for any other purpose than as an emulsifying agent, the last syllable of the former name has been altered in favor of the new spelling," officials said.

Officials emphasized that no change has been made in

the size of the package, price, or formulæ and that each of the five different types of the product will carry the new spelling "Petrogalar." The new corporate name is: Petrogalar Laboratories, Inc., and the address remains, 8134 McCormick Boulevard, Chicago, Illinois.

### SCHERING TO MARKET SULFADIAZINE

Sulfadiazine which, according to Perrin Long, M.D., of Johns Hopkins University, is likely "to run sulfanilamide off the drug store shelves" as the drug of choice in the treatment of hemolytic streptococcus infections as well as in pneumonia, will be marketed by the Schering Corporation of Bloomfield, N. J. Schering has just introduced Sulamyd, sulfacetimide-Schering, for use in urinary tract infections.

Sulfadiazine (2-sulfanilamidopyrimidine) has been found less toxic than other anti-pneumococcic sulfonamides. Nausea and vomiting have occurred in only about 10 per cent of the many cases treated with the new drug. Higher blood concentrations are more easily attained and maintained after oral dosage and sulfadiazine readily penetrates cerebrospinal, ascitic and pleural fluids.

### SOLUTION ADDED TO SQUIBB GROUP OF AMINOPHYLLINE PRODUCTS

To provide for all forms of administration of aminophylline, E. R. Squibb & Sons, New York, have added Solution Aminophylline Squibb to their previously introduced line of tablets and powder. The solution is supplied in 2 c.c. ampuls containing per c.c. 3¾ grains (0.25 gram) of aminophylline in sterile aqueous solution for *intramuscular* injection; and 10 c.c. ampuls containing ⅜ grain (0.025 gram) per c.c. of aminophylline in sterile aqueous solution for *intravenous* injection.

Aminophylline (theophylline with ethylene diamine U.S.P. XI) is rapidly absorbed, producing prompt physiologic response. Recognized indications for the use of aminophylline are: as a diuretic and myocardial stimulant; in bronchial asthma; Cheyne-Stokes respiration; paroxysmal cardiac dyspnea; and for the relief of pain due to coronary sclerosis.

### SQUIBB STILBESTROL RELEASED

After two years of clinical trial, during which time over a hundred papers were published reporting studies in which it was used, stilbestrol, manufactured by E. R. Squibb & Sons, New York, is now available for general distribution throughout the country. Stilbestrol is a synthetic estrogen possessing the physiologic properties of estrogenic substances derived from natural sources. Chemically, it is alpha, alpho'-diethyl-4, 4'-stilbenediol. It is also called diethylstilbestrol.

Stilbestrol orally has a ration of effectiveness to intramuscular injection much superior to that possessed by natural estrogens. It has another advantage over the natural estrogens in that it is considerably more economical.

Squibb Stilbestrol is supplied in three forms: (1) Compressed tablets, either uncoated or enteric coated, for oral administration; (2) stilbestrol in oil, for intramuscular injection; and (3) pessaries, for vaginal medication.

In common with other highly potent chemotherapeutic agents, stilbestrol should be used only by or under supervision of a physician. Literature describing its dosage, indications and precautions is available to physicians upon request.


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*Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

NUTRITION IN HEALTH AND DISEASE. By Lenna F. Cooper, B.S., M.A., M.H.E., Chief, Department of Nutrition, Montefiore Hospital, New York City; Formerly Food Director, University of Michigan; Dean of School of Home Economics, Battle Creek College; Supervising Dietitian, U. S. Army, 1918-1919; President, American Dietetic Association, 1937-1938; and, Edith M. Barber, B.S., M.S., Writer and Consultant, Food and Nutrition; Editor, Food Column, *New York Sun;* and Food Column, Bell Syndicate; Lecturer on History of Cookery, Teachers College, Columbia University; and, Helen S. Mitchell, B.A., Ph.D., Director of Nutrition on the Staff of the coördinator of Health, Welfare and Related Defense Activities, Federal Security Agency, and Research Professor of Nutrition, on Leave from Home Economics Division, Massachusetts State College. Eighth edition, completely revised and reset. 100 illustrations and 2 colored plates. Philadelphia: J. B. Lippincott Company, 1941. Price: $3.50.

The eighth edition of this volume originally published in 1928 has been arranged to conform closely to "A Curriculum Diet for Schools of Nursing" published by the National League of Nursing Education. It is very complete and rather simply written.

———MSMS———

THE PREMATURE INFANT. Its Medical and Nursing Care. By Julius H. Hess, M.D., Professor and Head of the Department of Pediatrics, University of Illinois College of Medicine; Attending Pediatrician, Illinois Research and Educational Hospital, Cook County and Michael Reese Hospitals; and Evelyn C. Lundeen, R.N., Supervisor, Premature Infant Station, Sarah Morris Hospital, Chicago. 74 illustrations. Philadelphia: J. B. Lippincott Company, 1941. Price: $3.50.

In greater than usual detail the handling of the premature infant is here discussed. The illustrations are well selected and the application of the material is practical. Considerable emphasis is placed upon the care of the premature infant in the home. The topography is excellent and the contents encyclopedic. It is suitable both for the physician and the advanced nurse.

———MSMS———

PRINCIPALS OF MICROBIOLOGY. By Francis E. Colien, B.S., M.S., Ph.D., F.A.P.H.A., Associate Professor of Bacteriology and Preventive Medicine in The Creighton University School of Medicine; Lecturer in Public Health and Preventive Medicine, Creighton Memorial, St. Joseph's Hospital School of Nursing, Omaha; Director of Laboratories, Health Department, City of Omaha; Major, Sanitary Division, United States Army Medical Reserve; Formerly Professor of Bacteriology and Preventive Medicine in the Central School of Nursing, Milwaukee; and, Ethel J. Odegard, R.N., A.B., M.A., Instructor in Sciences Applied to Nursing, College of Saint Teresa, Winona, Minnesota; Formerly Director of Nursing Education in the Central School of Nursing, Milwaukee; Education Director, Miami Valley Hospital School of Nursing, Dayton, Ohio. St. Louis: The C. V. Mosby Company, 1941. Price: $3.00.

This is a teaching book for nurses which is arranged for the most part to meet the recommendations of the Curriculum Committee on Education of the National League of Nursing Education. It is very complete for this purpose and has many demonstrative cuts. The paper is green tinted. It is recommended for teaching purposes.

———MSMS———

THE FOOT AND ANKLE. Their Injuries, Diseases, Deformities and Disabilities. With Special Application to Military Practice. By Philip Lewin, M.D., F.A.C.S., Associate Professor of Bone and Joint Surgery, Northwestern University Medical School; Professor of Orthopædic Surgery, Post-graduate Medical School of Cook County Hospital; Attending Orthopædic Surgeon, Michael Reese Hospital, Chicago; Consulting Orthopædic Surgeon, Municipal Contagious Disease Hospital, Chicago; Formerly Major Medical Reserve Corps, United States Army. With 304 illustrations. Line drawings by Harold Laufman, M.D. Second edition. Philadelphia: Lea & Febiger, 1941. Price: $9.00.

Because of the changing national and international situations notable changes have been made in the second edition of the volume first published in 1940. These events made it imperative for the author to emphasize the military aspects of injuries, diseases, and disabilities of the foot and ankle. However, the foot and ankle diseases found in everyday practice have not been neglected. The typography is excellent and the illustrations well chosen. It is recommended for study and reference.

———MSMS———

A MANUAL OF BANDAGING, STRAPPING, AND SPLINTING. By Augustus Thorndike, Jr., M.D., F.A.C.S., Associate in Surgery, Harvard Medical School; Surgeon to the Department of Hygiene; Harvard University. Illustrated with 117 engravings. Philadelphia: Lea & Febiger, 1941. Price: $1.50.

In a pocket manual the author presents in picture form the common types of bandages, straps and splints taught by the Harvard Medical School. Its pictorial system is advantageous for quick reference. In the foreword Elliott C. Cutler says, "To the young surgeon . . . let him remember that a neat dressing often bespeaks a good job beneath."

———MSMS———

THE 1941 YEAR BOOK OF PUBLIC HEALTH. Edited by J. C. Geiger, M.D., Dr.P.H., Director of Public Health, City and County of San Francisco; Clinical Professor of Epidemiology, University of California; Clinical Professor of Preventive Medicine and Public Health, Stanford University School of Medicine; Lecturer in Preventive Medicine and Public Health, University of Southern California Medical School. Chicago: The Year Book Publishers, Inc., 1941. Price: $3.00.

This follows the usual make-up of the other thirteen year books bringing in abstract form last year's printed reports on this subject—both the clinical material and laboratory work. A section on "Military Hygiene" holds prominence. The typography is good and the material is well arranged.

———MSMS———

SULFANILAMIDE AND RELATED COMPOUNDS IN GENERAL PRACTICE. By Wesley W. Spink, M.D., Associate Professor of Medicine, University of Minnesota Medical School. Chicago: The Year Book Publishers, Inc., 1941. Price: $3.00.

For the average practitioner who is more or less completely confused on the use and abuse of the sulfonamides this monograph is of real practical value. The author begins with the historical development and after discussing the drugs themselves discusses their use in various diseases. The typography is good and the material is well arranged. It is recommended to the general practitioner.

———MSMS———

ESSENTIALS OF GENERAL SURGERY. By Wallace P. Ritchie, M.D., Clinical Assistant Professor, Department of Surgery, University of Minnesota Medical School. With 237 illustrations. St. Louis: The C. V. Mosby Company, 1941. Price: $8.50.

"In general it reflects the attitude and practices of the Surgical Department of the University of Minnesota Medical School." This 813 page compendium of surgery provides a basic outline of general surgery and a review which would save time and energy for the practicing surgeon. The material is well arranged, the typography is good and it is recommended to the general practitioner for review.

———MSMS———

DOCTOR COLWELL'S 1942 DAILY LOG. Champaign: Colwell Publishing Company, 1941. Price: $6.00.

For the doctor who wants a one-volume financial record this daily log is very simple to use and yet inclusive enough to furnish, at any time, complete financial data of one's practice. There is space allotted for almost every need of the general practitioner. The publishers claim a renewal rate of 90 to 95 per cent from year to year and renewals of this type of book should be its greatest recommendation.

MICROBES WHICH HELP OR DESTROY US. By Paul W. Allen, Ph.D., Professor of Bacteriology and Head of the Department, University of Tennessee; D. Frank Holtman, Ph.D., Associate Professor of Bacteriology, University of Tennessee; and Louise Allen McBee, M.S., Formerly Assistant in Bacteriology, University of Tennessee. St. Louis: The C. V. Mosby Company, 1941. Price: $3.50.

This was written for your patient who needs to become "microbe conscious." It is interesting, well organized, and scientifically correct. The typography is excellent. It is printed on green tinted paper and well illustrated. The physician will find it of assistance in explaining the character of specific diseases to his patients. It is recommended for the intelligent patient.

———MSMS———

CARDIAC CLINICS. A Mayo Clinic Monograph. By Fredrick A. Willius, B.S., M.D., M.S. in Med., Head of Section of Cardiology, Mayo Clinic, and Professor of Medicine, Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota, Rochester, Minn. St. Louis: The C. V. Mosby Company, 1941. Price: $4.00.

In this monograph Willius after discussing signs and symptoms of cardiac disease takes up various specific pathological conditions and discusses them by means of case reports. This method is indeed enlightening and aids in fixing the acquired knowledge. It is very readable but also valuable as a reference book and is recommended to the general practitioner who has a special interest in cardiac diseases.

———MSMS———

OCCUPATIONAL DISEASES. Diagnosis, Medicolegal Aspects, and Treatment. By Rutherford T. Johnstone, A.B., M.D., Director of the Department of Occupational Diseases, Golden State Hospital, Los Angeles, California; Formerly Assistant Professor of Medicine, University of Pittsburgh School of Medicine. Illustrated. Philadelphia and London: W. B. Saunders Company, 1941. Price: $7.50.

This very well written and practical reference book for industrial physicians is of considerable value and interest to the general practitioner who should be interested in the relation of health to industry. The typography is excellent, the plates are well chosen, and the material is arranged for easy reference.

———MSMS———

NEW AND NONOFFICIAL REMEDIES, 1941. Containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1941. Cloth. Price, postpaid, $1.50. Pp. 691—LXX. Chicago: American Medical Association, 1941.

"New and Nonofficial Remedies" is the book in which are described the medicinal preparations found by the Council on Pharmacy and Chemistry to be acceptable for the use of physicians. The book is cumulative; each year there are added the descriptions of products accepted during the foregoing year. Those taken off the market or found no longer worthy of continued acceptance are deleted. The book is at that time also revised to bring it up to date with the most recent medical thought. Until recent years the additions and deletions have about balanced. Recently, however, the bulk of the book has been increasing and thus year's volume represents the largest book of the more than thirty volumes that have been issued.

This year's new additions include the new sulfanilamide derivative, sulfathiazole, as well as sulfapyridine sodium; antipneumococcic rabbit serum of types I, II, III, V, VII and VIII; human convalescent measles serum and human convalescent scarlet fever serum; an staphylococcus antitoxin. The field of endocrinology is represented by the addition of chorionic gonadotropin (follutein). The addition of shark liver oil reflects the search for new sources of vitamins A and D caused by the cutting off of foreign cod liver oil. Other newly accepted preparations are ampules of camphor, digilanid and magnesium trisilicate.

The most extensive revision is represented by the rearrangement and amplification of the chapter, "Serums

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and Vaccines." This chapter is now prefaced by a helpful index, an innovation in N.N.R. The chapter, "Vitamins and Vitamin Preparations for Therapeutic and Prophylactic Use," has been revised to keep it abreast of the newer developments in this field. Here, too, we find something of an innovation in the systematic use of graphic chemical formulas. It is understood that this practice will be extended to other parts of the book in future editions. Careful perusal will reveal minor revisions in many parts of the book made in the interest of greater clarity and in tthe effort to keep the book thoroughly up to date.

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### SALUTE TO THE WOMAN'S AUXILIARY

The quiet and modest way in which the Woman's Auxiliary works often obscures the value of their contributions both to organized medicine and to the community at large. This modesty is commendable, but it is time that The Medical Society recognized, and the public learned, of the highly effective work being done by the Woman's Auxiliary to The Medical Society of New Jersey. Our women are daily performing tasks which should be acknowledged by the community. It would be well if the County Auxiliaries sent to their local newspapers properly prepared releases telling the world what they are doing for public welfare.

From the public point of view the most conspicuous of the good works of the Auxiliary is their donation of gifts and money to worthy causes. Even a partial list of the beneficiaries of their efforts will surprise most of us. Thus, in the past year, the following agencies and individuals have received gifts, money or equipment from the Woman's Auxiliary.

Children's Homes, Visiting Nurses Association, British War Relief Association, Hospitals, Nurses' Homes, Red Cross, Widows and Orphans of Doctors, hospitalized ward patients, soldiers in camps in New Jersey, the Tuberculosis League, the Girl Scouts, Cancer Control organizations, libraries, patients in need of blood transfusions, Y.W.C.A.'s, and the benevolent funds of the Medical Societies themselves.

The Auxiliaries of Atlantic, Burlington, Mercer, and perhaps other counties, have established funds to help worthy student nurses receive their professional education. This is philanthropy of the most constructive sort and it is an investment in human character. The special Blood Transfusion Fund of Ocean County is a unique and truly life-saving philanthropic project. The gift of food, recreational equipment and clothing to both British and American soldiers is a highly practical contribution to National Defense. Through special questionnaries, the Auxiliary will classify its members with reference to skills useful in National Defense programs, particularly in connection with evacuation and sabotage projects.

Even these imposing contributions, significant as they are, do not represent the totality of their services. The Auxiliary is of inestimable value to The Medical Society in dozens of other ways, too. They secure medical speakers and forums for the profession's public relations campaign. They promote friendly relationships among physicians' families, this work reaching a high-spot each year when they arrange for the banquet at the Annual Meeting of The Medical Society of New Jersey. They keep running the wheels of our Clinical Conferences by serving as hostesses, registrars and guides.

The proportion between the size of each County Medical Society and the much smaller size of the corresponding Auxiliary is strange. Perhaps doctors are at fault in not more fully activating their mothers, sisters and wives to joining the Auxiliary. If so, the fault should be corrected, for the Auxiliary is an indispensable member of our large New Jersey medical family. Incidentally, doctors are reminded of the fact that the JOURNAL contains an Auxiliary section which Auxiliary members are anxious to read. Make the JOURNAL accessible to your womenfolk.

We may never have said so before. If so, let it be said now. We know the full worth of the Auxiliary; we are grateful to them.—*The Journal of the Medical Society of New Jersey,* November, 1941.

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### AFFLICTED CHILD

#### Send Prompt Bills to Commission

Are medical bills for care of afflicted children in your County or District being sent to the Michigan Crippled Children Commission through the local hospitals, in compliance with the Afflicted Child Act?

The Crippled Children Commission is paying bills for the medical care of afflicted and crippled children. However, it cannot pay for bills which it does not receive or which are unduly delayed. Therefore, contact the business office of your hospitals and ascertain if statements for the services of physicians are being sent, with the hospital bills, to the Crippled Children Commission in Lansing.

Suggest to your members that they render their bills *promptly,* through the hospital, to the Commissions, as bills over sixty days old cannot be honored for payment by the Commission.

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# INDEX TO VOLUME 40

## AUTHORS' INDEX


Alcorn, Kent, 696
Alpiner, S., 199
Aronstam, Noah E., 355
Ascher, Meyer, 800
Ashley, L. Byron, 43, 287

Bailey, Louis J., 107
Baker, Henry K., 969
Berge, Clarence A., 189
Birch, William G., 535
Bloomfield, J. J., 32
Bogart, Leon M.. 981
Branch, Hira E., 814
Brines, Osborne A., 47, 201, 204
Brooks, Clark D., 43
Brunner, Hans, 363
Brush, Brock, 525

Carter, J. Bailey, 515
Clapper, Muir, 280
Cole, Rufus, 19
Collisi, Harrison S., 965
Cosgrove, S. A., 357

Deakin, Rogers, 440
Dempster, J. H., 705
Downing, John Godwin, 265

Euler, Marjorie, 698
Fandrich, T. S., 111
Finch, D. L., 199
Fitz, Reginald, 345

Gariepy, L. J., 705

Hanelin, Henry A., 876
Hart, Deryl, 179
Hartzell, John B., 36, 277
Heetderks, Dewey R., 983
Hildreth, R. C., 710
Hill, A. Morgan, 811
Himler, L. E., 707
Holm, Benton, 988
Hoyt, Donald F., 217
Hubbell, R. J., 710
Humphrey, A. A., 199

Jacoby, Adolph, 435
Jennings, Alpheus F., 606
Jewell, F. C., 272

Keane, William E., 823
Kleinschmidt, Earl E., 458, 971

La Ferté, A. D., 531
Lamberson, Frank A., 603
Lavender, Howard C., 807
Lockwood, Ambrose L., 509, 593
Lofstrom, J. E., 272

McKhann, Charles F., 455
Manning, J. Edward, 201, 204
Marshall, Don, 367
Miller, Hazen L., 609
Mollmann, Arthur H., 882
Moore, V. M., 806
Musser, J. H., 99, 292
Myers, Gordon B., 280

Narotzky, A. S., 287
Neal, Paul A., 32
Nelson, Harry M., 111
Noth, Paul H., 47

Ormond, John K., 525

Patterson, Ralph M., 271
Payette, Hazen J., 995
Peelen, J. William, 873
Pelouze, P. S., 444
Pierson, Richard N., 691, 884
Priestley, James T., 867

Riecker, Herman H., 208
Robb, J. Milton, 280
Robinson, R. G., 299
Rosenzweig, Saul, 800

Schreiber, Frederic, 603
Schwartz, Louis Adrian, 113
Scully, John C., 979
Selling, Lowell S., 789
Shaffer, Loren W., 529
Sherman, George A., 289
Sichler, H. G., 284
Siddall, Roger S., 612
Smith, Dudley R., 440
Sodeman, W. A., 292
Stalker, Hugh, 105
Steffensen, W. H., 30
Sweany, Henry C., 448

Todd, Oliver E., 191

Van Bree, Raymond S., 197
Van Pernis, Paul A., 806
Webber, Jerome E., 811
Weinberger, Herbert, 289
Willson, J. Robert, 795

Yott, William J., 528

Zlatkin, Louis, 800


## CONTRIBUTED PAPERS

### A


Acute gangrenous cholecystitis in children. L. Byron Ashley, M.D., F.A.C.S., and A.S. Narotzky, M.D., 287

Adjustment of marital problems, The. Lowell S. Selling, M.D., Ph.D., Dr.P.H., F.A.C.P., 789

Amebiasis with pleuropulmonary complications. George A. Sherman, M.D., F.A.C.P., and Herbert Weinberger, M.D., 289

Anastomosis, End-to-end. Mathematical approach to the causes of the marginal gangrene. Arthur H. Mollmann, M.D., 882

Ankle joint, Severe fractures of the. Conservative management and a presentation of typical cases. Howard C. Lavender, M.D., 807

Anoxia, Cerebral, and craniocerebral injuries. Frederic Schreiber, M.D., 603

Appendicitis—the problem from an educational standpoint. R. G. Robinson, M.D., 299

Arthritis, a contra-indication for typhoid vaccine fever therapy. William J. Yott, M.D., 528

B

Blackwater fever, The successful use of sulfanilamide in the treatment of. Benton Holm, M.D., 988

Bladder, urinary, Sarcoma of the. William E. Keane, M.D., 823

Blood bank, Experience with the. Osborne A. Brines, M.D., F.A.C.P., and J. Edward Manning, M.D., 201

Bowel, large, Carinoma of the. John B. Hartzell, M.D., F.A.C.S., 36

C

Cancer of the cervix. Time wasted. Oliver E. Todd, B.S., M.D., 191

Carcinoma of the large bowel. John B. Hartzell, M.D., F.A.C.S., 36

Carcinoma of the prostate. John K. Ormond, M.D., and Brock Brush, M.D., 525

Carcinoma of the stomach—diagnosis and results. James T. Priestley, M.D., 867

Carcinoma, Primary, of the scrotum. Kent Alcorn, B.S., M.S., M.D., 696

Cerebral anoxia and craniocerebral injuries. Frederic Schreiber, M.D., 603

Cervix, Cancer of the. Time wasted. Oliver E. Todd, B.S., M.D., 191

Changing picture of diabetes, The. Reginald Fitz, M.D., 345

Cholecystitis, Acute gangrenous, in children. L. Byron Ashley, M.D., F.A.C.S., and A. S. Narotzky, M.D., 287

Chronic non-tuberculous lesions of the lungs. J. E. Lofstrom, M.D., and F. C. Jewell, M.D., 272

Clinico-Pathological Conference. Detroit Receiving Hospital, 116, 212

Clinico-Pathological Conference. Paul H. Noth, M.S., M.D., and Osborne A. Brines, B.S., M.D., 47

Colon, Surgical diseases of the: diagnosis and treatment. Clark D. Brooks, M.D., F.A.C.S., and L. Byron Ashley, M.D., F.A.C.S., 43

Congenital umbilical hernia. Harry M. Nelson, M.D., and T. S. Fandrich, M.D., 111

Coronary occlusion, Diagnosis of. J. Bailey Carter, M.D., 515

Coronary vascular heart disease. J. H. Musser, M.D., 99

Craniocerebral injuries, Cerebral anoxia and. Frederic Schreiber, M.D., 603

Cyanosis of the newborn. Charles F. McKhann, M.D., 455

Cyst, Septic branchial, eradication by electrical cauterization. Clarence A. Berge, M.D., 189

D

Dermatitis and eczema—industrial aspects. John Godwin Downing, M.D., 265

Dermatitis, exfoliative, Sulfathiazole in. Henry K. Baker, M.D., 969

Development of the plasma bank. Osborne A. Brines, M.D., F.A.C.P., and J. Edward Manning, M.D., 204

Diabetes, The changing picture of. Reginald Fitz, M.D., 345

Diagnosis of coronary occlusion. J. Bailey Carter, M.D., 515

Diethylstilbestrol, Effect of oral administration of, on menopausal symptoms. J. William Peelen, M.D., 873

Diverticula, Urethral, and cul-de-sacs. Noah E. Aronstam, M.D., 355

Dyspepsias, The surgical. Ambrose L. Lockwood, D.S.O., M.C., M.D., C.M., F.A.C.S., F.R.C.S. (C), 593

E

Early beginnings of preventive medicine in Michigan. Earl E. Kleinschmidt, M.D., 458

Eczema, Dermatitis and—industrial aspects. John Godwin Downing, M.D., 265

Effect of oral administration of diethylstilbestrol on menopausal symptoms. J. William Peelen, M.D., 873

End-to-end anastomosis. Mathematical approach to the causes of the marginal gangrene. Arthur H. Mollmann, M.D., 882

Epilepsy as a traffic hazard. L. E. Himler, M.D., 707

Eunuchism. Treatment with testosterone propionate. Hazen L. Miller, M.D., 609

Examination of selectees as a society activity, 991

Experience with the blood bank. Osborne A. Brines, M.D., F.A.C.P., and J. Edward Manning, M.D., 201

Experiences in premarital council in private practice. Richard N. Pierson, M.D., 884

F

Factors in maternal health—hospitals and staff groups. S. A. Cosgrove, M.D., F.A.C.S., 357

Feminine psychology. Louis Adrian Schwartz, M.D., 113

Femur, Fractures of the neck of the. A. D. La Ferté, M.D., 531

Fever, Rheumatic. Preventive aspects. Herman H. Riecker, M.D., 208

Forensic psychiatry in Michigan. Ralph M. Patterson, M.D., 271

Fractures of long bones, A method for correction of angulation in. V. M. Moore, M.D., and Paul A. Van Pernis, M.D., 806

Fractures of the ankle joint, Severe. Conservative management and a presentation of typical cases. Howard C. Lavender, M.D., 807

Fractures of the neck of the femur. A. D. La Ferté, M.D., 531

G

Gall-bladder disease—surgical treatment. L. J. Gariepy, M.D., and J. H. Dempster, M.D., 705

Genito-urinary tract, Radiation therapy in the treatment of malignant disease of the. H. G. Sichler, M.D., 284

Gonococcal infections. Diagnosis and criterion of cure. Adolph Jacoby, M.D., 435

Gonorrhea in the female. Rogers Deakin, M.D., and Dudley R. Smith, M.D., 440

Gonorrhea in the male. P. S. Pelouze, M.D., 444

H

Heart disease, Coronary vascular. J. H. Musser, M.D., 99

Hernia, Congenital umbilical. Harry M. Nelson, M.D., and T. S. Fandrich, M.D., 111

Highlights of twenty-five years of service, The. Marjorie Euler, 698

Hygiene, Industrial. Responsibility of the medical profession. Paul A. Neal, M.D., and J. J. Bloomfield, 32

Hypertension, Unusual. A case of ten year's duration. Hugh Stalker, M.D., F.A.C.P., 105

Hypothyroidism in children. A review of masked symptoms and evaluation of response to thyroid treatment. A. Morgan Hill, M.D., and Jerome E. Webber, M.D., 811

I

Indications for simple and radical mastoid operations. Hans Brunner, M.D., 363

Industrial hygiene; responsibility of the medical profession. Paul A. Neal, M.D., and J. J. Bloomfield, 32

Injuries, Self-inflicted, in civil practice. Deryl Hart, M.D., 179

Intestinal suction drainage in facilitating one-stage re section of the right colon. John B. Hartzell, M.D., 277

Intravenous or retrograde pyelography? R. J. Hubbell, M.D., and R. C. Hildreth, M.D., 710

L

Labor, Uterine inertia in the first stage of. Roger S. Siddall, M.D., 612

Lungs, Chronic non-tuberculosis lesions of the. J. E. Lofstrom, M.D., and F. C. Jewell, M.D., 272.

M

Malignant disease of the genito-urinary tract, Radiation therapy in the treatment of. H. G. Sichler, M.D., 284

Marital problems, The adjustment of. Lowell S. Selling, M.D., Ph.D., Dr.P.H., F.A.C.P., 789

Marriage after forty. Harrison S. Collisi, M.D., F.A.C.S., 965

Massive arsenotherapy in early syphilis. Loren W. Shaffer, M.D., 529

Mastoid operations, simple and radical, Indications for. Hans Brunner, M.D., 363

Maternal health, Factors in. Hospitals and staff groups. S. A. Cosgrove, M.D., F.A.C.S., 357

Medical societies and medical progress. Rufus Cole, M.D., 19

Menopausal symptoms, Effect of oral administration of diethylstilbestrol on. J. William Peelen, M.D., 873

Method for correction of angulation in fractures of long bones. V. M. Moore, M.D., and Paul A. Van Pernis, M.D., 806

Modern treatment of traumatic shock, The. Henry A. Hanelin, M.D., 876

Moniliasis—sulfapyridine treatment. Raymond S. Van Bree, M.D., 197

Movement for the registration of vital statistics. Earl E. Kleinschmidt, M.D., Dr.P.H., 971

Muscular dystrophy, Progressive pseudohypertrophic. A new regime of treatment. Hira E. Branch, M.D., 814

N

Nose, The physiology of the. Dewey R. Heetderks, M.D., 983

O

Ophthalmia, Sympathetic. Don Marshall, M.D., 367

Orbital complications, Sinusitis. W. H. Steffensen, M.D., F.A.C.S., 30

P

Pain, Presacral resection for the relief of. John C. Scully, B.S., M.D., 979

Parenthood, Planned. Its contribution to national preparedness. Richard N. Pierson, M.D., 691

Physiology of the nose, The. Dewey R. Heetderks, M.D., 983

Pituitrin in postpartum hemorrhage. Transabdominal intra-uterine injection. Donald F. Hoyt, M.D., 217

Planned parenthood. Its contribution to national preparedness. Richard N. Pierson, M.D., 691

Plasma bank, Development of the. Osborne A. Brines, M.D., F.A.C.P., and J. Edward Manning, M.D., 204

Pneumococcus, Type III, meningitis—recovery following sulfathiazole. Gordon B. Myers, M.D., J. Milton Robb, M.D., and Muir Clapper, M.D., 280

Pneumonia. Clinical diagnosis. Alpheus F. Jennings, M.D., 606

Postpartum hemorrhage, Pituitrin in. Transabdominal intra-uterine injection. Donald F. Hoyt, M.D., 217

Postpartum sterilization. William G. Birch, M.D., 535

Pregnancy, Uterine fibroids complicating. J. Robert Willson, M.D., 795

Pregnancy, Vitamin and mineral requirements in. J. H. Musser, M.D., and W. A. Sodeman, M.D., 292

Premarital council, Experiences in, in private practice. Richard N. Pierson, M.D., 884

Pre-operative preparation of the patient. Ambrose L. Lockwood, D.S.O., M.C., M.D., C.M., F.A.C.S., F.R.C.S. (C), 509

Presacral resection for the relief of pain. John C. Scully, B.S., M.D., 979

Preventive medicine in Michigan, Early beginnings of. Earl E. Kleinschmidt, M.D., 458

Primary carcinoma of the scrotum. Kent Alcorn, B.S., M.S., M.D., 696

Primary tuberculous infection in the adult. Henry C. Sweany, M.D., 448

Progressive pseudohypertrophic muscular dystrophy. A new regime of treatment. Hira E. Branch, M.D., 814

Prostate, Carcinoma of the. John K. Ormond, M.D., and Brock Brush, M.D., 525

Pseudohypertrophic muscular dystrophy, Progressive. A new regime of treatment. Hira E. Branch, M.D., 814

Psychiatry, Forensic, in Michigan. Ralph M. Patterson, M.D., 271

Psychology, Feminine. Louis Adrian Schwartz, M.D., 113

Pyelography, Intravenous or retrograde? R. J. Hubbell, M.D., and R. C. Hildreth, M.D., 710

R

Radiation therapy, in the treatment of malignant disease of the genito-urinary tract. H. G. Sichler, M.D., 284

Relationship of the roentgenologist to the physician and surgeon, The. Leon M. Bogart, M.D., 981

Rheumatic fever. Preventive aspects. Herman H. Riecker, M.D., 208

Roentgenologist, The relationship of the, to the physician and surgeon. Leon M. Bogart, M.D., 981

S

Sarcoma of the urinary bladder. William E. Keane, M.D., 823

Scrotum, Primary carcinoma of the. Kent Alcorn, B.S., M.S., M.D., 696

Self-inflicted injuries in civil practice. Deryl Hart, M.D., 179

Septic branchial cyst. Eradication by electrical cauterization. Clarence A. Berge, M.D., 189

Service, The highlights of twenty-five years of. Marjorie Euler, 698

Severe fractures of the ankle joint. Conservative management and a presentation of typical cases. Howard C. Lavender, M.D., 807

Shock, traumatic, The modern treatment of. Henry A. Hanelin, M.D., 876

Sinusitis—orbital complications. W. H. Steffensen, M.D., F.A.C.S., 30

Staphylococcus albus bacteremia secondary to a carbuncle of the nose, Sulfamethylthiazol in. D. L. Finch, M.D., S. Alpiner, M.D., and A. A. Humphrey, M.D., 199

Sterilization, Postpartum. William G. Birch, M.D., 535

Stomach, Carcinoma of the. Diagnosis and results. James T. Priestley, M.D., 867

Successful use of sulfanilamide in the treatment of blackwater fever, The. Benton Holm, M.D., 988

Suction drainage, Intestinal, facilitating one-stage resection of the right colon. John B. Hartzell, M.D., 277

Sulfamethylthiazol in Staphylococcus albus bacteremia, secondary to a carbuncle of the nose. D. L. Finch, M.D., S. Alpiner, M.D., and A. A. Humphrey, M.D., 199

Sulfanilamide, The successful use of, in the treatment of blackwater fever. Benton Holm, M.D., 988

Sulfathiazole in exfoliative dermatitis. Henry K. Baker, M.D., 969

Surgical diseases of the colon. Diagnosis and treatment. Clark D. Brooks, M.D., F.A.C.S,, and L. Byron Ashley, M.D., F.A.C.S., 43

Surgical dyspepsias, The. Ambrose L. Lockwood, D.S.O., M.C., M.D., C.M., F.A.C.S., F.R.C.S. (C), 593

Sympathetic ophthalmia. Don Marshall, M.D., 367

Syphilis, early, Massive arsenotherapy in. Loren W. Shaffer, M.D., 529

T

Testis, The undescended. Louis J. Bailey, M.D., M.Sc. (Med.), F.A.C.P., 107

Testosterone propionate, treatment with, Eunuchism. Hazen L. Miller, M.D., 609

Tongue, Xanthoma of the. Frank A. Lamberson, M.D., 603

Traffic hazard, Epilepsy as a. L. E. Himler, M.D., 707

Tuberculous infection, Primary, in the adult. Henry C. Sweany, M.D., 448

Type III pneumococcus meningitis. Recovery following sulfathiazole. Gordon B. Myers, M.D., J. Milton Robb, M.D., and Muir Clapper, M.D., 280

Typhoid vaccine fever therapy, a contra-indication for. Arthritis. William J. Yott, M. D., 528

U

Undescended testis, The. Louis J. Bailey, M.D., M.Sc. (Med.), F.A.C.P., 107

Unusual hypertension. A case of ten years' duration. Hugh Stalker, M.D., F.A.C.P., 105

Urethral diverticula and cul-de-sacs. Noah E. Aronstam, M.D., 355

Urinary bladder, Sarcoma of the. William E. Keane, M.D., 823

Uterine fibroids complicating pregnancy. J. Robert Willson, M.D., 795

Uterine inertia in the first stage of labor. Roger S. Siddall, M.D., 612

V

Varicose veins. Allergic reactions in injection treatment. Saul Rosenzweig, M.D., Meyer Ascher, M.D., and Louis Zlatkin, M.D., 800

Vital statistics, Movement for the registration of. Earl E. Kleinschmidt, M.D., Dr.P.H., 971

Vitamin and mineral requirements in pregnancy. J. H. Musser, M.D., and W. A. Sodeman, M.D., 292

X

Xanthoma of the tongue. Frank A. Lamberson, M.D., 603

## DEPARTMENT INDEX

### Business Side of Medicine

Business side of medicine in boom times, The. Allison E. Skaggs and Henry C. Black, 741

### Communications

Bennett, Dorothy A., 662
Doran, Frank, 1006
Jones, Harold W., 312
Lewis, S. M., 1006
Richards, R. Milton, 1006

### County and Personal Activities

County and Personal Activities, 65, 149, 231, 313, 399, 481, 555, 655, 748, 926, 1004

### Doctor's Library

Allen, Paul W., Holtman, D. Frank, and McBee, Louise Allen: Microbes which help or destroy us, 1011

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### Editorial

AMA needs a new charter, The, 388

"Advanced first-aid for civilian defense," 1000

An error corrected, 826

Annual county secretaries' conference, 1000

Appreciation to Michigan Legislature and the governor, 1000

Back to the seventeenth century by order of the Supreme Court, 121

Best yet, The, 826

Cancer in Michigan, 303

Council elections, 122

Detroit, a major medical center, 53

Discussion conferences, 540

Doctor and safety, The, 466

Doctor comes second, The, 892

Don't tell the world, 304

Emergency needs for narcotics, 1001

General practitioner, 220

Great meeting, A, 618

His father's footsteps, 714

Hospital, Dr.? 54

In these hands, 890

Keeping out of trouble, 1000

Mad dogs, 466

Mature judgment needed, 618

Medical preparedness in Michigan, 994

Merry Christmas, 995

Michigan Medical Service, 826

Muskegon honors George L. Le Fevre, 388

Postgraduate courses for the upper peninsula, 893

Read and write, 303

Readers' service, 893

Refuge from ragweed, 541

Relief for the doctor, 121

Report rheumatic fever, 220

State of Washington solves its state-medicine threat, The, 1000

Vacations, 540

You have the facts, 994

Your wish has come true, 714

### Experimental Procedures

Pituitrin in postpartum hemorrhage. Transabdominal intra-uterine injection. Donald F. Hoyt, M.D., 217

### Half a Century Ago

Dignity of the profession. Lyman W. Bliss, M.D., 332

Diphtheria—What shall we do with it? W. C. Huntington, M.D., 502

Four months' work in laparotomy. J. H. Carstens, M.D., 772

Gall stones—a newer plan of treatment. J. R. Williams, M.D., 676

La grippe. B. B. Godfrey, M.D., 948

Need for a better study of diseases of the skin, The. W. F. Breakey, M. D., 852

One day with the village doctor. Charles S. Cope, M.D., 580

Phthisis. Heneage Gibbes, M.D., 420

### In Memoriam

Adams, John F., 304

Bates, La Motte F., 397

Belote, John F., 304

Bevington, Harry G., 831

Bolender, J. E., 304

Bullock, Earl S., 560

Burleson, Arthur H., 304

Cameron, Don Bruce, 304

Campbell, A. Milton, 831

Diamond, Francis J., 658

Dick, Kenneth W., 304

Edmunds, Charles W., 479

Frank, Maxwell Nathaniel, 479

Forbes, Edwin B., 479

Gustin, J. William, 753

Hafford, George Clinton, 397

Haviland, James J., 397

Heffron, Charles H., 397

Henry, Thomas Jefferson, 304

Hewitt, Herbert W., 70

Hoff, Edwin C., 70

Huegli, Albert G., 398

Huizinga, J. G., 155, 304

Hungerford, P. R., 479

Husband, Francis H., 398

Laverty, L. F., 1007

Leitch, Arthur E., 70

MacPherson, Alexander H., 304

Morton, Moses Emmett, 70

Munro, Frederick W., 1007

Owen, Arthur E., 1007

Petrie, W. Paul, 479

Riley, William H., 831

Rockwell, Alvin H., 658

Rosenblum, Herman G., 70

Royer, William A., 398

Sackrider, George P., 398

Sanderson, Hermon Harvey, 753

Sawicki, Bruno J., 70

Schram, John A., 831

Seybold, George A., 831

Smith, Eugene, Jr., 479

Smith, G. Reginald, 753

Stewart, L. H., 480

Valade, Cyril K., 398

Walker, Claude W., 753

West, Arthur E., 480
Wilkinson, Chester Ambrose, 70
Wilson, Elwood D., 658

### Michigan's Department of Health

1940 state's safest year for babies? 64
1941 births set new record, 1003
100,000 births in 1941? 653
100,000 Kahn's a month, 553
Cancer program expanded, 829
Communicable disease comparison, 473
Communicable disease reports, 654
Decline of contagion, 64
Defense industries spend $350,000 for health, 926
Diphtheria in two schools, 926
Diphtheria outbreaks in August, 830
"Flu" not reported, 148
Firearms accidents, 64
Free sulfathiazole, 394
Hayfever immunity treatments, 474
Health of defense workers, 926
Health units appraised, 230
Kahn tests set new record, 473
Kellogg grant aids virus research, 1003
Less measles in June, 654
Lobar pneumonia less, 230
Malaria in Michigan, 746
Marked decrease in smallpox, 148
Marriages increase 23 per cent, 474
Maternal mortality at new low, 474
Measles cases double, 148
Measles, 50,000 cases of, 473
Measles increase, 64
Michigan record better than nation, 829
Midwinter joint meeting, 148
More births, 64
Near epidemic of measles, 308
New acting deputy commissioner, 394
New Bureau of Tuberculosis, 230
New health units, 653
New high record in births, 308
New low death rates, 393
New pneumonia serum available, 148
New sanatorium consultant, 830
New water supply prompts dental survey in Escanada, 1003
Not enough public health nurses, 553
Obstetrics course in January, 925
Obstetrics studies open to four, 654
Physicians can register births of years ago, 926
Pneumonia deaths drop, 393
Polio cases below average, 829
Poliomyelitis low in July, 747
Record low infant death rate, 308
Rocky Mountain spotted fever, 552
Safe water, 474
Saginaw survey finds eleven new cases, 474
September infantile paralysis under normal, 926
Shiawassee, 148
Shiawassee sixty-third, 64
Sixty-five county health units, 746
Sixty-seven polio cases in November, 64
Smallpox at Port Huron, 654
Smallpox cases increase, 747
Smallpox outbreak exposes induction center, 1003
State money needed, 148
Syphilis tests reach new high, 747
Whooping cough communicable disease No. 1, 926
Whooping cough highest in five years, 1003
Will there be any poliomyelitis in Michigan this year? S. D. Kramer, M.D., 550

### Michigan State Medical Society

Committee reports, 637
County secretaries' conference, 145
Delegates to M.S.M.S. House of Delegates, 470
Mid-winter meeting of the Council, 134
Preliminary program, 623
Proceedings, 1941 meeting, 894
Program, 717
Roster, 371, 472, 559
Sessions of House of Delegates, 76th annual meeting, 545

### Miscellaneous

Coroner action required in all cases not seen by physician during thirty-six hours preceding death, 999
Examination of selectees as a society activity, 991
Medical preparedness committees, 73
Medical preparedness in Michigan, 131
Medical profession and selective service, The, 221, 258
Michigan hospitals and medical payments, 123
Michigan Medical Service, 55, 129, 223, 250, 328, 416, 496, 576, 672, 768, 848, 946
Neuro-psychiatric Institute of Hartford Retreat—Announcement, 744
Postgraduate program, 740
Program for graduates in medicine, 132, 222
Remission of dues of members in service, 131
Short sketch of Heneage Gibbes, 678
What about Grand Rapids? 715
You are going to pay more taxes. Hazen J. Payette, LL.B., 995

### President's Page

Afflicted—Crippled children, 539
Annual meeting, and farewell, The, 713
Medical rehabilitation of rejected draftees, 120
Medicine marches forward, 889
N.Y.A. health program, 52
One examination for selectees, 302
Postgraduate education in Michigan, 619
Season's greetings, The, 993
Success, and thanks, 467
To the future, 825
What value membership? 387
Your responsibility to your legislator, 219

### Woman's Auxiliary

Woman's Auxiliary, 62, 146, 228, 309, 395, 475, 554, 925

### You and Your Business

1941 convention in Grand Rapids, 61
Ambiguous law, An, 226
Annual report of Legislative Committee, 1940-1941, 547

Association of physicians and cultists, 306
Benefits of membership, 306
Brown-Wagner-George Hospital Construction Bill, The, 468
Call it "The Beaumont Bridge," 305
Damage may result from the act, 468
"Every eligible physician," 58
Honorary and associate membership for laymen, 58
In Michigan, it's two years, 305
Instalment credit regulations not to affect loans for medical and hospital expenses, 920
Intangibles tax and accounts receivable, 57
"Invite them to join," 923
Is the business boom affecting your collections? 924
Keeping complete written records. Leo M. Ford, J.D., 59
Law on obstetrical engagements, The, 226
Laws affecting doctors, 58
Legislation for crippled and afflicted children, 390
Liability of a city-employed physician, 58
Liability of physicians in military service, 227
M.S.M.S. dues not raised, 133
"Malpractice fever," 392
Medical welfare in Michigan—Results of survey, 922
Medicine out of the air, 828
Membership increase, 390
Membership marches upward, 828
Michigan hospitals and medical payments plan, 226, 305, 922
Michigan's intangibles tax, 133
Military membership, 392
National conference on medical service, 133
Not a privileged communication, 133
NYA health examinations discontinued, 920
One examination for draftees, 920
Physicians may select hospitals for afflicted children, 828
Placement bureau, 227, 828
Privileged communications, 58, 922
Rehabilitation of rejected draftees, 920
Right and wrong way, The, 57
Roster number, 305
Thanks, 828
Use the title "M.D.," 61
Workmen's compensation law on choice of healer, 390
Your income tax, 923

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